

SAP Sales Cloud

SAP Commissions Implementation

Participant Guide

C4H430

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WELCOME TO THE SAP COMMISSIONS IMPLEMENTATION

Introduction

SAP Commissions for Consultants is a four-day interactive course. The course lessons provide you with key foundational and advanced content related to Commissions and its related processes. There are 8 lessons in this Participant Guide:

- Lesson 1: Commissions Overview and Key Terms
- Lesson 2: Navigation and Administrative Options
- Lesson 3: Organizational Data
- Lesson 4: Classification and Compensation Elements
- Lesson 5: Compensation Plans and Rules
- Lesson 6: Commissions Pipeline
- Lesson 7: Additional Topics
- Lesson 8: Workshop

Course Objectives

- Introduce key Commissions terminology and concepts
- Review Commissions workspaces
- Define Organization Data
- Review Plan Rules, Compensation Plans and Compensation Elements
- Discuss how to implement the various Administrative functions
- Demonstrate how to build a plan from start to finish in Commissions
- Define the appropriate implementation tasks
- Identify implementation best practices

Course Breakdown

The Participant Guide consists of 8 lessons. Each lesson will cover a series of topics. The instructor will demonstrate how to perform key functions in Commissions and discuss how to best implement Commissions.

Here are some of the major topics covered in this training

- Workspaces
- Sales Organization Data
- Periods & Versions
- Classification & Transactions
- Plans and Rules
- Administration
- Data Integration
- Calculations and Pipelines

CONSULTANTING FOR COMMISSIONS

As a Commissions Consultant your main responsibility is to provide professional Commissions product knowledge and to help implement the Commissions product to an SAP client.

Tips for Success:

- **Participate!** This is a highly interactive class. We encourage participation and asking questions. The instructor will be demonstrating many system examples.
- **Take Notes!** It's highly encouraged that you take notes during the class so that you can refer to them during the workshop day.

Estimates Schedule:

Days 1-3: During the first three days the instructor will review and demonstrate all the key tasks and important areas of Commissions

Day 4: This is where you'll get a chance to review a sample customer scenario and decide what type of plan to implement.

✍ Notes:

LESSON 1: INTRODUCTION

LESSON 1: INTRODUCTION

Lesson 1 Objectives

- Provide an overview of SAP Commissions
- Discuss the overall compensation process
- Identify SAP Commissions key terms
- Explain naming conventions

SAP COMMISSIONS OVERVIEW

SAP Commissions is an “end-to-end” solution that automates the incentive compensation process from sales order to payment for direct and indirect sales forces. In addition to the calculation of the incentive compensation, through SAP Commissions:

Payees can:

- Accept compensation plans
- Raise compensation disputes
- View Dashboards

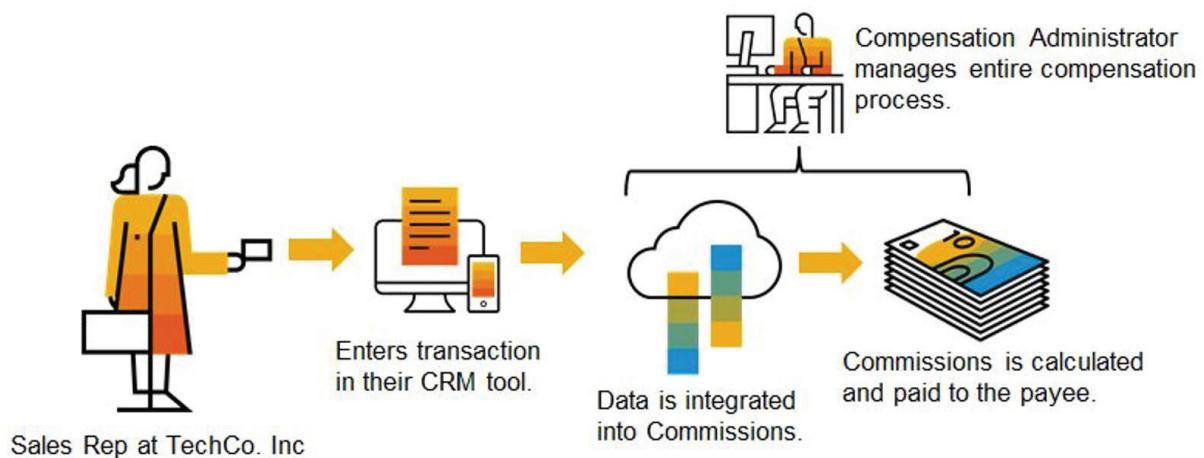
Administrators can:

- Update payee quotas, territories and rates
- Update sales compensation plan designs
- Leverage generated data to run both administrative and end-user reports
- Send out plan documents and design corresponding approval process
- Design end-user dashboards to be displayed to sales representatives and sales managers
- Model changes in the incentives payouts for a given change in a compensation plan

Notes:

COMPENSATION PROCESS OVERVIEW

Compensation is defined as the total amount of monetary payment provided to an employee, for work performed. The components of compensation are detailed in a compensation plan. A compensation plan is a set of rules that specifies how to compensate the participant.



Notes:

SAP COMMISSIONS KEY TERMS

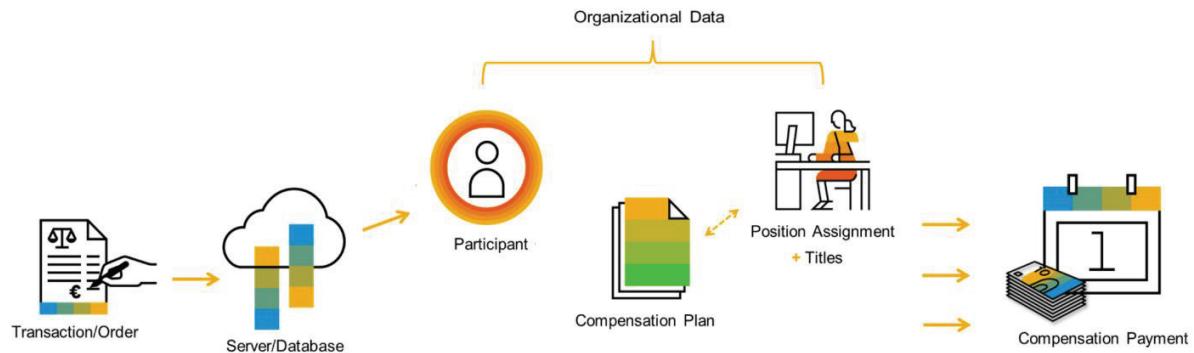
Term	Definition
Participant	Internal or external individual representatives or sales teams included in incentive compensation programs. Participants are known as Payees.
Position	Unique job role within an organization.
Position Assignment	Is created when the Participant is assigned to a Position.
Title	Occupational grouping, Titles are used to group positions that are related by job function across the organization.
Relationships	The association between two Positions used to process rolled credits.
Organization Data	Data related to a Participant (payee).
Reference Data	Data about the organization required by Commissions before compensation can be processed.
Plan Data	Objects used to create compensation plans, including plans, rules, and compensation elements.
Default Period	Drives which versions of data are displayed in your workspace.
Effective Dates	The start and end dates for a version of an object. It is date range within which a version of a record is valid/effective in Commissions.
Transactions / Orders	It contains the details of the sale. Transactions are the basic unit of data for compensation processing in Commissions.

SAP COMMISSIONS KEY TERMS

Term	Definition
Event Types	Labels used to describe transactions, like a sales activity a transaction represents. Examples can include booking, invoicing or shipping.
Credits	What gets generated when a transaction is processed. Output of the Credit Rule.
Credit Type	Labels used in credit rules to describe the resulting credits. Examples may include revenue, order or renewal.
Primary Measurements	The value of the aggregation of Credits amounts for each position assignment. Output of the Measurement Rule.
Secondary Measurement	The value of aggregated Primary Measurements or of calculations based on formulas.
Incentives	The incentives earnings calculated for each position assignment assigned to a plan. Output of the Incentive Rule.
Deposits	Amount of compensation calculated for a position assignment for the period in which the Pipeline was run. Output of the Deposit Rule.
Payments	The final amount to be paid to the participant in the specified period.

COMPENSATION PROCESS

There are many components to the compensation process cycle. Let's look at a high-level overview of the process in SAP Commissions.



Transaction data is imported into SAP Commissions. When a Pipeline is run, Commissions references the compensation plan, position, participant, title, organizational, and plan data, to accurately calculate the compensation payment.

All of these components work together to calculate and pay a correct payment to a participant, during a specific period.

The compensation plan is a key component in this process. The compensation plan will determine how payees are compensated. You must build accurate compensation plans in Commissions to produce accurate payment outcomes.

Notes:

NAMING CONVENTIONS

When naming your Rules and Rule Elements, it's best to be consistent, by defining the labels at the beginning, and by using the initials of the type of object they represent.

Names should be:

- Consistent
- Easy to Find
- Easy to Reference
- Easy to Identify

Naming Convention Recommendations

The following represent specific recommendations for naming conventions:

- Rules automatically sort first by number and then in alphabetical order, so using a letter or a number could help organize search results.
- Naming conventions beginning with an abbreviation of the rule type assists in easily identifying different types of rules. For example:

Rule Name		Rule Output*
Credit Rule	CR<Meaningful to Customer>	CO
Primary Measurement Rule	PMR <Meaningful to Customer>	PMO
Secondary Measurement Rule	SMR <Meaningful to Customer>	SMO
Incentive Rule	IR <Meaningful to Customer>	IO
Incentive Commissions Rule	ICR <Meaningful to Customer>	ICO
Deposit Rule	DR <Meaningful to Customer>	DO
Detailed Deposit Rule	DDR <Meaningful to Customer>	DDO

*Typically, same as Rule name but starts with the abbreviation indicating output

- Apply consistent naming throughout. For example, use all lower case or ALLCAPS
- Include the object as part of the name. For example, *Southeast Territory* or *T_Southeast*
- Use consistent abbreviations before object names. For example, *RT_Monthly_Commission*
- Use the description field to further define an object
- Attribute Labels do not change in the Commissions Repository. It is a good idea to prefix the field with GA01 or GN01. This will help easily find where data is stored from a database perspective.
- Keep track of the objects you create in Commissions in a separate sheet for your reference

LESSON 1 REVIEW

In this lesson, we reviewed the following topics:

- Provided an overview of SAP Commissions
- Discussed the overall compensation process
- Identified SAP Commissions key terms
- Explained naming conventions

Notes:

LESSON 2: COMMISSIONS SETUP

LESSON 2: COMMISSIONS SETUP

Lesson 2 Objectives

- Review the Sales Performance Home Page
- Provide an overview of various SAP Commissions workspaces and toolbars
- Discuss Global Values
- Define Calendars and Default Periods
- Review Processing Units and its functions
- Review Business Unit security and Role based security
- Demonstrate how to utilize System Preferences and User Preferences
- Discuss the Customizations workspace and functions
- Review Data Integration

Lesson 2: Commissions Setup

Topic 1: Sales Performance Home Page

SALES PERFORMANCE HOME PAGE



The Sales Performance Home Page Workspaces:

1. **Processing Logs** provide log files for pipelines and data integration jobs.
2. **Security Logs** provide views failed logins, password change activity and more.
3. **Purge Logs** provide detailed purge logs.
4. **User Administration** allows for the configuration of User roles and permissions.
5. **Global Settings** allows the configuration of password policies, email settings, Authentication settings, Purge Logs settings, and Branding Settings.
6. **Process Configuration** allows for the configuration of email notifications and associated templates.
7. **Maintenance:** executes maintenance tasks

SALES PERFORMANCE HOME DEMONSTRATION

The following topics are covered during the trainer led demonstration. Use the notes section below to note key points from the Sales Performance Home Page demonstration.

Processing Logs: Allows Users to view log files for Pipelines and data integration jobs. This includes:

- Pipeline Logs
- CDL DataFiles
- CDL Errors/Alerts
- Session Logs
- Source Files
- Target Files

Security Logs: Security Logs allow Users to view failed logins, password change activity, and more.

Purge Logs: Purge Logs allow Users to view Purge exercises and who initiated the purge.

 **Notes:**

End of SPH demonstration

USER ADMINISTRATION

The User Administration workspace allows the configuration and management of user data, personal data, titles, groups, roles, and permissions.

The screenshot shows the SAP User Administration workspace. On the left, there's a sidebar with icons for Home, Return to Administration, and other system navigation. The main area has a title 'User Administration' and a 'Users' table with several rows. Below the table are sections for 'Titles', 'Groups', and 'Roles'. On the right, there's a detailed view of a user profile. The 'Manage User Data' tab is selected, indicated by a yellow box. This tab includes fields for 'User ID', 'TrueComp User ID', 'Description', and 'Is Locked' (with a toggle switch). There's also a 'View Personal Data' link. At the bottom, there's a 'Business Units' section.

Through the Manage User Data tab in the User Administration workspace, Admins can unlock a participant's profile. Admins can also block a participant from being purged.

This is a detailed view of the 'Manage User Data' tab for a user named 'John Doe'. The top navigation bar shows 'Manage User Data' and 'View Personal Data'. The user information section shows 'User: John Doe'. Below it, there are fields for 'User ID' (PortalAdmin3), 'TrueComp User ID' (PortalAdmin3), 'Description' (Adminuser Creation), and 'Is Locked' (with a green toggle switch). To the right, there's a 'LDAP/ADSI Attributes' section with fields for 'User Name' (PortalAdmin3) and 'Groups' (empty). At the bottom, there's a 'Save' button.

Administrators can manage Business Units and add Users to assigned roles and proxies.

USER ADMINISTRATION DEMONSTRATION

The following pages contain additional content related to the user administration system demonstration performed by the trainer. For additional writing space, please use the notes section.

Creating a Super User Account.

During the installation process, SAP Portal creates a super user account. This account provides access to all SAP Portal tasks, and you should use this account to initially create accounts to administer user accounts.

You need to determine how you will provide the users administrative access to the SAP Portal and associated applications. In fact, it is not possible to use title-based authorization to provide access to administrative screens and functionality.

You can create additional administrator user accounts in one of the following ways:

- Create user store groups to group administrators, and then assign administrative roles to them in SAP Portal.
- Add Admin Users in the Portal and assign the Users to roles.

SAP Portal provides an administrator role called Portal Admin. This role provides access to all the tabs on SAP Portal administration home page. You can assign this role to create new administrator user accounts. You can assign administrator roles from multiple applications to the same user or group.

Note: The default Portal Administrator role assigns access rights to all other SAP Sales Cloud web applications. However, it does not provide any privileges on those applications.

The default role provides unrestricted access rights to the application. For example, the Portal Administrator role allows a user to access all the administration screens and tabs on SAP Portal. If you want to restrict access only to some functionality on the application, you can create an application-specific administrator role that provides only the specific access rights you want to assign.

Note: If you create a custom role to provide administrative rights to SAP Sales Cloud web applications, you must assign an SAP Portal application access permission that would make the application available to the user or group to which the custom role is granted. In the absence of an access permission, the user or group will not be able to access the application on which administrative permissions are granted

Demonstration: Continue to the next page for further detail.

USER ADMINISTRATION DEMONSTRATION

Create A New Administrative User

It is not necessary to assign a user to SAP Portal's Global role. Every user is automatically assigned to the Global role in SAP Portal. For simplicity, roles are normally assigned to groups or titles so that users automatically inherit the associated roles and permissions.

With new users, it is recommended to use role assignment by group or title, then assign roles to an individual user for exceptions.

Create a proxy for another user:

As an SAP Portal administrator, you can add, modify, or remove proxy relationships for users. If you grant users permission, they can manage their own proxy relationships.

A proxy user is someone who you grant access to your SAP Portal applications. Generally, a proxy user is considered a special user who is not a Commissions participant, such as a participant's executive assistant. When a proxy user logs in, she has the same level of access as the original user. If desired, you can specify a time period for which the proxy user is effective. The proxy user will not be able to access your account outside of the defined effective dates for the proxy relationship.

Note: If your SAP Portal implementation is set up in pure trusted mode (without a user store), proxy users are unavailable.

View User Details

The **Manage User Data** tab shows the user's roles, groups, titles, and proxy relationships.

- Select **Is Blocked from Personal Data Purge** to block a user from purging.
- If the user's account is locked because of failed login attempts, the **Is Locked** toggle is enabled.

The **View Personal Data** tab shows the user's personal data:

- For Participants, this tab shows the Payee Audit History including name, email address, Effective Start/End dates and any other fields that have been marked as Personally Identifiable Information (PII) in Commissions.
- For Administrators, the tab shows the user's Audit History including name, email address, and Last Modified Date. If the user is eligible for purging, the **Purge Now** button appears on this tab. Click the button to purge the user's personal data.

Demonstration: Continue to the next page for additional notes space.

USER ADMINISTRATION DEMONSTRATION

 **Notes:**

End of User Administration Demonstration.

GLOBAL SETTINGS DEMONSTRATION

Page Settings

Administrators can enable features, including “out of the box features” with SAP Commissions, such as Dashboards, Disputes, and Documents.

General Settings

- Disable site-wide system generated e-mails for end users -- enabling this preference will stop all system generated e-mails from delivery to end users.
- Send copy (cc) of all system generated e-mails -- Can enter selected users e-mails by separating the email addresses using a comma (,) - All E-mails are delivered to specified users. Time Constraint - Delay of about 30 seconds for the preference change to take effect.

Authentication Settings:

- **Allow Users to Change Password:** Select Yes to allow users to change their login password. The default is No. If users have permissions to change their passwords, SAP Portal displays a Change Password button in a user's SAP Portal My Profile.
Note: This option displays only if SAP Portal is configured for Direct Authentication.
- **Require Authentication for Proxy Log-in:** Selecting Yes forces users to re-authenticate when they log in as a proxy user. The default is Yes. Note: This option displays only if SAP Portal is configured for Direct Authentication.
- **Account Lockout Threshold:** This option specifies the number of failed login attempts that are allowed before the account is locked. For example, if the option is set to 3, the account is locked if a user enters wrong credentials for three times consecutively.
- **Reset Account Lockout Threshold After in Hours:** This defines a time frame for counting incorrect login attempts. For example, if the option is set to 1, and the Account Lockout Threshold is set to 3, a user can enter incorrect login details three times within an hour. If the option is set to 0.25 and the Account Lockout Threshold set to 3, user can enter incorrect login details three times within 15 minutes. Portal provides the option to set Lockout duration shorter than 1 hour.
- **Account Lockout Duration in Hours:** This option specifies the time period after which the locked account is automatically unlocked. User can make the account lockout duration shorter than 1 hour. For example, if the option is set to 0.25 the user account is automatically unlocked after 15 minutes.

Continue the Global Settings Demonstration on the next page.

GLOBAL SETTINGS DEMONSTRATION: GDPR

Under the GDPR regulation, companies are required to purge personal data, if a request is submitted. The Administrator can complete this task in the Data Protection Policy on the Global Settings page.

The screenshot shows the 'Data Protection Policy' settings page. It includes sections for 'Personal Data' and 'Security Logs'. In the 'Personal Data' section, there are fields for 'Retention Period for Purge Jobs (days)' (set to 365) and 'Purge Frequency in Days (0: disabled)' (set to 30). A warning message states: '⚠ Purge processes remove personally identifiable information (PII) from terminated payees and inactive administrators who have passed the retention period, which may affect calculations that depend on PII.' Below this, 'Days in Advance to Send Purge Reminder Email' is set to 1. The 'Next purge scheduled for Oct 1, 2019 4:00:00 AM' field is shown. In the 'Security Logs' section, 'Purge security logs older than (days)' is set to 90. A blue button labeled 'Purge Now' is highlighted with a yellow border.

Setting	Value
Retention Period for Purge Jobs (days)	365
Purge Frequency in Days (0: disabled)	30
Days in Advance to Send Purge Reminder Email	1
Purge security logs older than (days)	90

- **Retention Period for Purge Jobs:** This specifies how old data needs to be before it can be considered for purging/deletion.
- **Purge Frequency in Days:** This option determines when logs are purged. A numeric value of zero, disables this function. It will not automatically purge logs. A numeric value of 5 will purge logs every 5 days and so forth.
- **Days in Advance to Send Purge Email:** Allows for a notification email to be sent to specified Administrators x days before a purge is initiated.
- **Purge Now:** This allows you to manually determine when to purge logs.
- **The following message is displayed upon purge:** "*Purge processes remove personally identifiable information (PII) from terminated payees and inactive administrators who have passed the retention period, which may affect calculations that depend on PII.*" By default, the purge process does not remove any results, or calculated data.

Continue the Global Settings Demonstration on the next page.

GLOBAL SETTINGS DEMONSTRATION: GDPR

Rules of Purge Eligibility

- PortalAdmin / Administrator users are always blocked from purge, even if the UI doesn't show them as blocked from purge. They are considered "system" users.
- Anyone marked as blocked from purge in User Administration is not eligible to be purged.
- Anyone, who has already been purged, cannot be purged again.
- Anyone, with an open dispute, cannot be purged.
- Participants, who are terminated after the retention period has passed, are eligible to be purged.
- Admin users, who have not logged in since the retention period, are eligible to be purged.

 Notes:

End of Global Settings Demonstration.

PROCESS CONFIGURATIONS

The Process Configuration workspace allows Administrators to customize email templates. Within the Business Process Management elements, four options (Business Events) are available for configuration.

1. Communicator
2. Incentive Management
3. Portal
4. Reporting and Analytics

The screenshot shows the SAP Process Configuration workspace under Business Process Management. The left sidebar has icons for Home, Administration, Business Events, Incentive Management, Portal, and Reporting & Analytics. The main area is titled 'Business Events' and shows a list of events with toggle switches. Most events are enabled (green switch), except for 'Report Generation' which is disabled (grey switch). The sections 'Communicator', 'Incentive Management', 'Portal', and 'Reporting & Analytics' are highlighted with orange boxes.

Event Category	Event Name	Status
Business Events	Communicator	Enabled
	Distribute Forms	Enabled
	Request Resolution	Enabled
	Incentive Management	Enabled
	Calculation Completed	Enabled
	Calculation Failure	Enabled
	Calculation Running	Enabled
	Calculation Submitted	Enabled
	Portal	Enabled
	Reporting & Analytics	Enabled
Report Generation	Disabled	

Enabled features are green. Disabled features are grey.

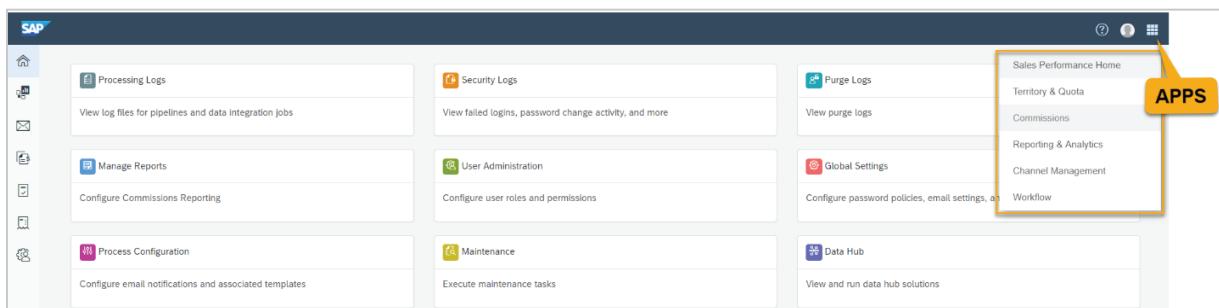
Lesson 2: Commissions Setup
Topic 2: System Navigation

SYSTEM NAVIGATION OVERVIEW

SAP Commissions is a web-based application that is accessed from an internet connection. Once you receive access, you can perform the login instructions below.

To Login:

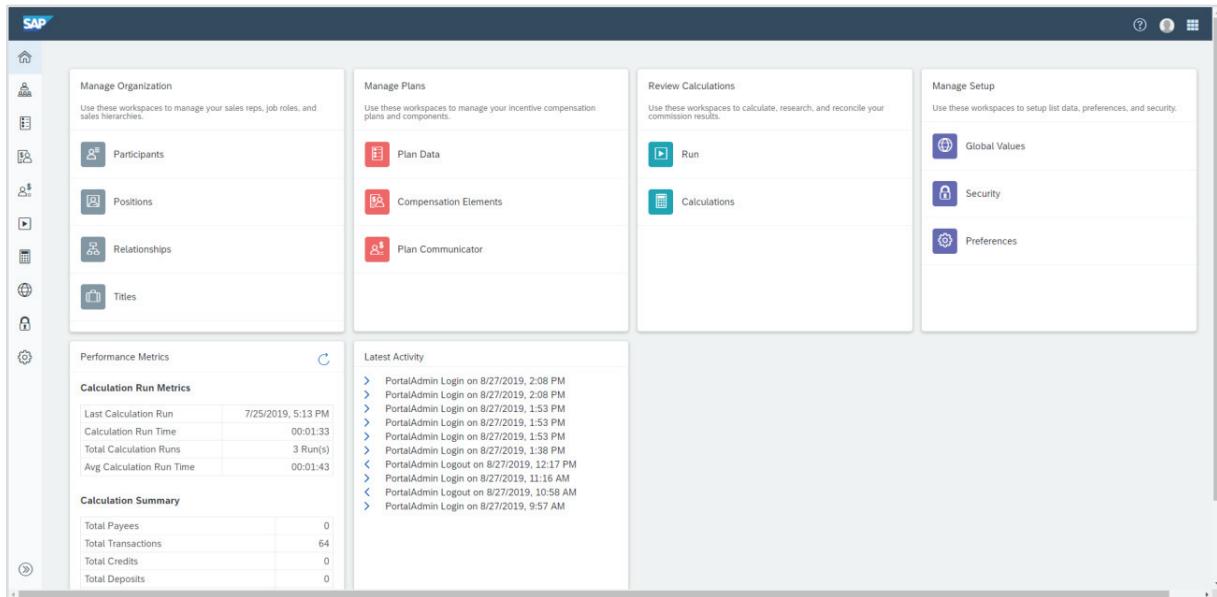
1. Click on the **SAP Commissions URL link** located in your system generated email.
2. Enter the provided **Username** and **Password** from the email. For security measures, it is recommended that you change the password after the initial login.
3. Click **Commissions** from the **Apps** icon.



You are now logged into **SAP Commissions!**

NAVIGATING COMMISSIONS USER INTERFACE DEMONSTRATION

This is the Landing Page. You can access different SAP Commissions workspaces from this page. You can also access the Performance Metrics data and Latest Activity.



Four Tiles:

- Manage Organization
- Manage Plans
- Review Calculations
- Manage Setup

Performance Metrics

- Details Calculation Runs Metrics and Calculation Summary data

Latest Activity:

- Details the latest activity in SAP Commissions

Apps Icon

- Access approved applications with this icon

Continue the navigating Commissions user interface demonstration on the next page.

NAVIGATING COMMISSIONS USER INTERFACE DEMONSTRATION

Workspace layout:

This is the Participant Workspace.

The screenshot shows the SAP Commissions Participant workspace. At the top, there's a toolbar with various icons. Below it is a search field labeled "Search Field". The main area is divided into two panes: the "Summary Pane" on the left and the "Details Pane" on the right. The "Summary Pane" contains a table with columns: Participant ID, Base Salary, User Name, Last Modified, and Effective Start Date. The "Details Pane" shows detailed information for a selected participant, with fields for Participant ID (PA-2112), First Name (Gary), Middle Name (Terence), Last Name (Alphonse), User Name (PA-2112), and other personal details like Date Hired, Business Unit, and termination date. The bottom of the screen shows navigation buttons (1-2-3-4-5-6-7-8-9-10).

Search Field: There are three different types of search: Simple Search, Advanced Search, and Related Search. Search and Advanced are available through the workspace toolbar.

Summary Pane: Displays all data and objects for the related workspace and default period, including any search.

Details Pane: Displays the details of objects selected in the summary pane.

Note:

These are standardized workspace in SAP Commissions. The data shown in the workspace is reflective of the workspace you are in, as well as the default period you have selected. For example, if you are in the Positions workspace, the data shown will be about Positions.

Data is also reflective of your administrative access. Limited access will provide a limited view, depending on your permission level.

Continue the navigating Commissions user interface demonstration on the next page.

NAVIGATING COMMISSIONS USER INTERFACE DEMONSTRATION

Workspace Toolbar and Icons: The Summary and Details panes contain a variety of icons to assist in performing various tasks in SAP Commissions. Shown below is a description for each icon.

Summary Pane Icons

Icon	Name	Definition
	Add	Add a new record
	Copy	Copy an existing record
	Edit	Edit a selected record
	Delete	Delete a selected record
	Manage Versions	Create a new version of an existing record without changing the original record
	Related Search	Conduct a search related to the record selected in the summary pane
	Research View	Research plan data specific to the selected Payee
	Audit	Display the Audit log for the item selected in the Summary pane
	Download	Download data specific to the workspace
	Upload	Upload excel data
	Export	Export the data to a comma-separated (CSV) file
	Configure Summary View	Change the data shown in the Summary pane

Details Pane Icons

Icon	Name	Definition
	Edit Details	Edit the selected record
	Configure Detail View	Change the data shown in the Details pane

End of the navigating Commissions user interface demonstration.

Lesson 2: Commissions Setup
Topic 3: Global Values

GLOBAL VALUES

Global Values are used throughout SAP Commissions to allow manual settings of specific plan, rules, elements, and values data types.

Global Values	
Calendars	<ul style="list-style-type: none">The structure that defines the fiscal periods used in Commissions and their relationships to each otherComposed of leaf-level periods (either months or weeks) and any number of higher-level periods (such as quarters and years)
Credit Types	<ul style="list-style-type: none">A label to identify credits (output of the Credit Rule)Identify credits with names such as quota, commission, order, and revenue
Earning Codes	<ul style="list-style-type: none">Labels that you can apply to different kinds of deposit earningsHelp external accounting systems to track different department earnings in the organization
Earning Groups	<ul style="list-style-type: none">Aggregates groups of deposits of the same Earning Group together into one payment, thus any negative values offset positive valuesSubdivides incentives into groups
Event Types	<ul style="list-style-type: none">A label you create to label / identify transactionsUsed to define the kind of sales activity a transaction represents, such as booking, invoicing, billing, and shipping
Fixed Value Types	<ul style="list-style-type: none">Optional labels you can create to label / identify Fixed Values (a static, numeric value that might not be tied to a period)Fixed value types can be Quotas, Commission Rates, and Counters
Position Groups	<ul style="list-style-type: none">A label you create to label / identify Positions.Used to group several Positions assigned to Payees to run the Pipeline calculation for a Position GroupDefine a selection of position assignments to finalize payments
Reason Codes	<ul style="list-style-type: none">Identify the reason for either adjustments or modifications to transactions, credits, or deposits
Unit Types	<ul style="list-style-type: none">Used to identify the type of unit a numerical value representsThis numerical value is a static number that can represent a currency, integer, percent, or quantity

COMMONLY USED GLOBAL VALUES

Event Types

Event types are labels to identify transactions. Event types are also used to define sales activity types, such as booking, invoicing, billing, and shipping.

Event types are required fields on the transaction records. These can be created during implementation or in live production environments. The identification allows the addition of multiple and relevant transactions to enable eligibility for calculations.

- It is essential to create an Event Type before loading transactions with that specific Event Type.
- Define all Event Types during the initial Global Values setup
- When defining credit rules, refer to the relevant Event Types

Credit Types

Credit types are labels that identify Credits. These are results of the Credit Rule. Credit Types are required fields in the Credit rule to label the resulting Credit as quota, commission, order, and revenue.

As an example, credits pertaining to “Product A” must be aggregated to calculate a commission rate that is different from “Product B.” It is crucial to define Credit Types in the Global Values setup.

Unit Types

Unit Types are used to identify the type of unit a numerical value represents. This numerical value is a static number that can represent a currency, integer, percent, or quantity. You can create new Unit Types. For example, Euro currency. When you create a new Unit Type, you will need to select a base Unit Type for this new Unit Type (Currency, Integer, Percent, or Quantity), so that the new Unit Type you created will inherit the characteristics of the base Unit Type you selected. In this workspace, you can create or modify Unit Types to represent numerical values. Unit Type labels appear in dialogs wherever unit values appear.

The following are base unit types:

- **Percent:** used to reflect a value as a percentage
- **Integer:** used to store integers (no partial amounts)
- **Quantity:** used to store any kind of number, including partial amounts (ex.3.14)
- **Currency:** used to store a currency value with appropriate placement of decimal points, commas, and currency symbols

EARNING CODES AND EARNING GROUPS

Earning Codes and Earning Groups are required fields within a deposit rule.

**Earning
Codes**

Used to define different types of deposits

**Earning
Groups**

Used to group similar types of deposits

Demonstration Notes:

 **Notes:**

CONSIDERATIONS WHEN CREATING GLOBAL VALUES

When creating Global Values, identify the Global Values that will be the most useful or necessary to build the compensation plan.

The following are helpful points to determine necessary Global Values:

- How does the customer group transaction types - product groups, sales activity type, etc.? This should determine which Event Types and Credit Types should be used.
- What Unit Types will the system be required to calculate? If multiple currencies are used, that will determine the Unit Types to be created in the system. For example, EUR with a base type of currency.
- How are the deposits grouped together for the pay file? Will the need exist to group negative and positive values to offset each other? This will determine which Earning Groups will have to be created.

COMMON ISSUES WITH MULTIPLE CURRENCIES

When multiple currencies are used, determine the following:

- What currency will be on the transaction data – local currency or USD?
- What currency will be on the quota data – local currency or USD?
- What currency will be on the pay files (usually local currency)?
- What is the conversion and how often is it updated?

If data is loaded, utilizing multiple local currencies, implement a generic currency data type with a currency base.

Another option is to perform all calculations, using the United States Dollar (USD), then convert the calculation to the needed local currency, at the deposit level.

GLOBAL VALUES BEST PRACTICES

How do you manage changes of Global Values, if the customer's business activity changed and affected the Global Values set in the initial implementation?

- Maintain the Global Values that have been used in the production environment. Once pipelines are run, do not delete the existing Global Values. If the business model changes and more are required, create new Global Values.

 **Notes:**

Lesson 2: Commissions Setup
Topic 4: Calendars and Default Periods

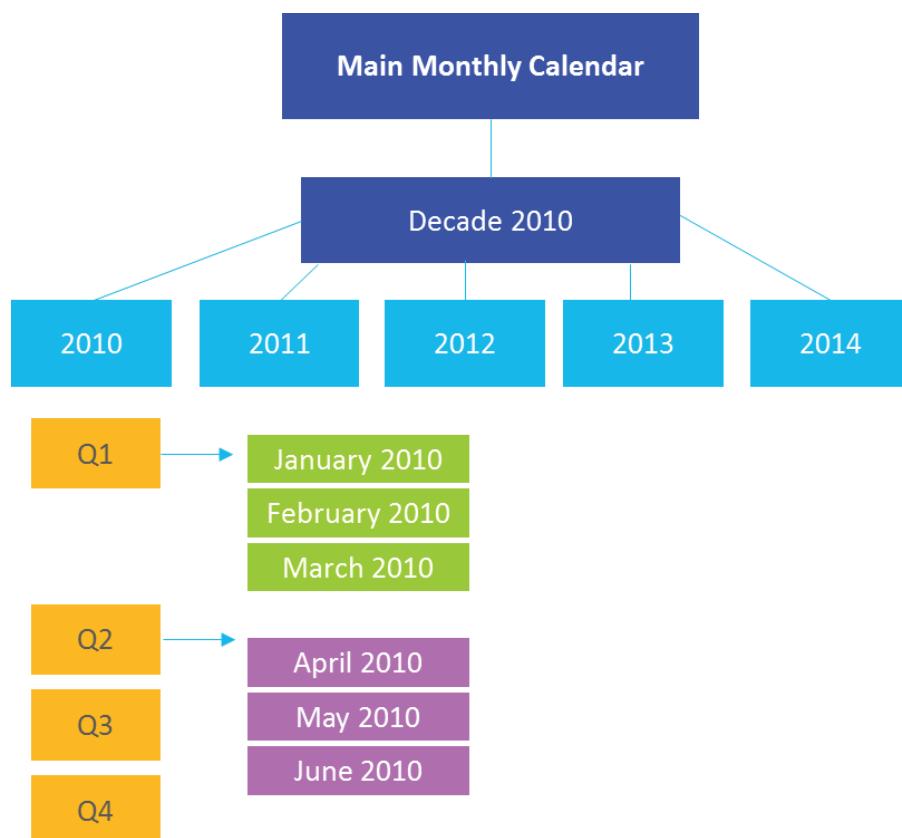
CALENDARS AND PERIODS

The calendar is a critical foundation piece to the design and build of your environment.

In SAP Commissions, calendars are used to structure the fiscal pay periods. Each calendar is composed of a hierarchy of periods, called the period tree. The period tree represents units of time for which your company manages compensation.

- You can have multiple Calendars, if needed.
- The smallest or lowest level period in the hierarchy is called the Leaf level period, which is usually a month or two weeks.

The most common calendar structure uses a month as the leaf-level period, three months as a quarter (For example, Q1 is January, February, and March), and 12 months or four quarters as a year. In this case, the quarters and years are the higher-level periods.



CALENDARS AND PERIODS

The concept of applying the leaf-level and higher-level periods remains the same, even if the calendar structure differs.

Calendars are associated with the compensation items, such as plans and rules, while a pipeline is run.

Credits, transactions, and orders are tracked by compensation date, which is the date a credit is made available or a transaction or order is completed. The compensation date is used by the pipeline to determine the period for which the transaction is processed. For example, a transaction, with a compensation date of February 2nd, is credited to the position assignment that is active on February 2nd, when the pipeline is run for the February period.



MAIN MONTHLY CALENDAR

During the implementation process, a minimum of one calendar is created. By default, the system contains a calendar called, “Main Monthly Calendar”. This calendar is composed of 17 periods, typically including one for the year, one for each of the four quarters. Months are nested in their respective quarters.

Most objects are associated with calendar periods.

The **Default Period** is used when new records are created in the user interface. The default period determines which version of an object and period of data is displayed. Therefore, it's important to confirm that you are in the correct default period on the correct calendar.

A period, for which the pipeline was run, has an associated set of results and transaction data. Results data is labeled with the period, for which the pipeline was run.

Data Associated with Calendars

The following data is period-based, and must be associated with a calendar:

- Commissions
- Credits
- Deposits
- Fixed Values
- Formulas
- Incentives
- Lookup Tables
- Measurements
- Payments and Balances
- Plans and Components
- Quotas
- Rate Tables
- Rules
- Variables

MULTIPLE CALENDAR SUPPORT

Organizations may use multiple calendars to manage different payment schedules or pay periods. Objects may be assigned to one calendar at a time.

For example, if a company pays dealers on a weekly basis (Monday through Sunday), and pays the sales force based on transactions within a month, a company will need to set the dealers on a special, week-based calendar, and the sales force on a regular monthly calendar.

To implement this, create one participant for each person or group requiring payment. Also, create appropriate titles, positions, and relationships.

For groups of participants who are paid weekly, create one set of plans, rules, rule elements, and so on, and assign them to the week-based calendar.

For groups of participants who are paid monthly, create a set of plans, rules, rule elements, and so on, and assign them to the month-based calendar.

When running the payment calculation, specify the calendar utilized and run the calculation separately for each participant group.

 **Notes:**

BEST PRACTICES

- Understanding your Calendar structure is imperative before you begin any Plan development.
- Ensure you have set your Default Period to the correct period, with the correct Calendar (if there are more than one), before you begin Rule development. Once a Plan element is built to a specific Calendar, you cannot alter it.
- Object names must be unique, despite the Calendar they are associated with. For example, you cannot have two rules with the same name, with two different Calendars.
- The Sequence used to build your calendar periods is critical. Use the UI template, to ensure it is created in the appropriate order.
- You will not be able to Delete a period once a pipeline is run, even if you have no plans set.
- Changing the dates of a period, after a single pipeline has been run, can cause a disconnect in the results. Therefore, make sure your Calendar is finalized before anything is run.
- Leaf Periods cannot overlap or contain gaps. If you have a need for a weekly leaf level period, then the “Month” that contains a group of weeks will have the same start date as the first week in the group and the same end date as the last week in the group. Therefore, it will NOT be the same as a Calendar Month.
- You will only see results for a Plan associated with a Calendar if you are in a default period of that same Calendar.

 **Notes:**

CREATING A CALENDAR DEMONSTRATION

Notes:

Lesson 2: Commissions Setup
Topic 5: Processing Units

PROCESSING UNITS

Often, businesses require you to run compensation calculations at different times, for different organizations. This may require different compensation cycles. A Processing Unit (PU) is an SAP Commissions compensation processing feature that supports calculation processing for subsets of Commissions data. This is partitioned logically within a single Commissions User Interface.

Processing Units Features:

- You can create as many Processing Units as needed.
- SAP Commissions does not limit the number of Business Units that can be assigned to a Processing Unit.
- When creating Processing Units, segments are created in Database tables. This increases performance.
- Calculation runs are completed separately for each Processing Unit.
- Reference data can be shared across Business Units. Reference data includes rules, rule elements, categories, classifiers, periods, and more.
- Positions, transactions, orders, and results data are assigned to one Business Unit and marked as belonging to specified Processing Units.
- When you create a Processing Unit, you cannot delete it. You can rename Processing Units.

When you start an implementation, you can ask if the customer needs a parallel calculation (which means two different calculations independent of each other). Even if that is not the case, you must recommend at least one Processing Unit for any implementation, as it would be beneficial to extend the implementation in the future.

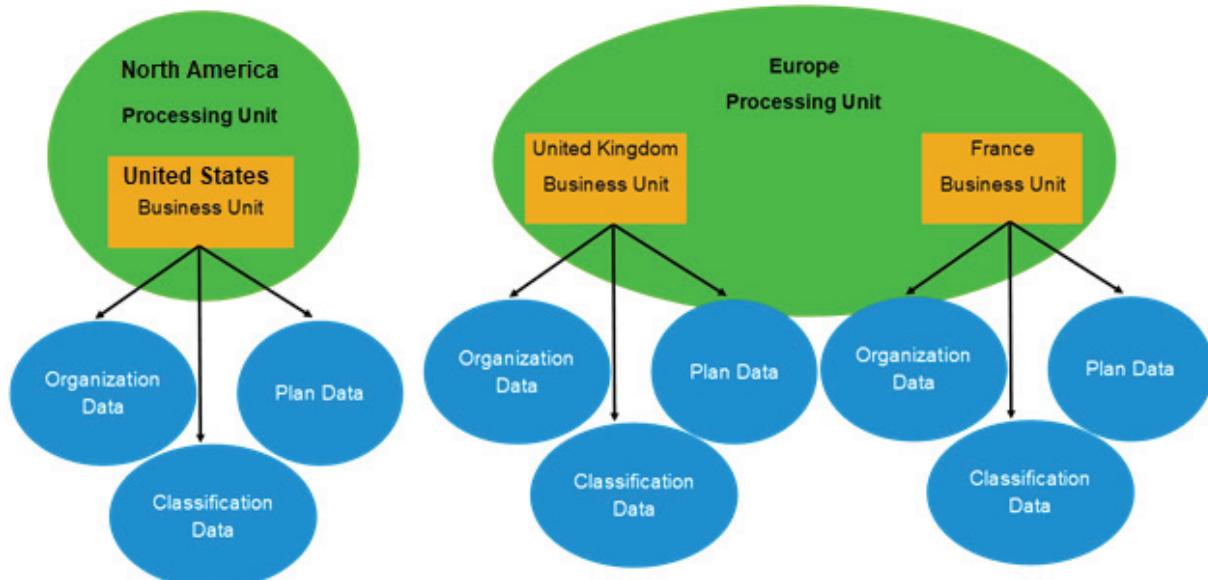
BUSINESS UNITS/PROCESSING UNITS MAPPING

Organizations can be divided into Business Units. One or more Business Units comprise each Processing Unit. A Business Unit (BU) organizes repository data for security access purposes. If a user does not have access to a Business Unit, the user cannot access the data associated with that Business Unit. To define a Processing Unit, you may map Business Units to Processing Units.

- Processing Units are calculation processing features.
- Business Units are security features.

One Processing Unit can have many Business Units mapped to it, but each Business Unit can only be mapped to one Processing Unit. When you create a Processing Unit, you need to identify a subset of Business Units to the specified Processing Unit.

When using Position Groups within Business Units, a Position Group is a part of the Business Unit's Processing Unit.



Notes:

PROCESSING UNITS REQUIREMENTS

- Typically, limit the number of Processing Units, based on the need to separate computation requirements across organizations or to stagger calculation runs more efficiently.
- No Position in the Processing Unit can maintain a relationship with another Position in a different Processing Unit. The position hierarchy in each Processing Unit is autonomous and self-contained.
- If you've enabled Processing Units but didn't define any Processing Unit, Commissions maintains a default Processing Unit to which all the Business Units are mapped. Objects such as Positions and Orders contain a Processing Unit identifier that cannot be null.
- If you create a Processing Unit with no Business Unit assignment, the calculation does not calculate anything when you run that Processing Unit.

If a transaction or order needs to be processed for multiple Processing Units, these must be duplicated for each Processing Unit. You should duplicate these orders and transactions outside Commissions, before importing the data into the staging tables.

Notes:

ENABLING AND USING PROCESSING UNITS

Enabling and creating Processing Units are default steps and two of the first steps of an implementation.

Processing Units Implementation and Configuration Tasks

1. Enable Processing Units.
2. Create Processing Units in the Processing Units workspace.
3. Create Business Units
4. Assign Business Units to Processing Units (in the Business Units workspace).

Note: Once you enable Processing Units, you cannot reverse it. Enabling Processing Units affects how your data is displayed, so please don't enable it if you are not sure you want to use it.

Notes:

ENABLING PROCESSING UNITS DEMONSTRATION

 Notes:

Lesson 2: Commissions Setup
Topic 6: Security

SECURITY

Management and access to data in the Commissions user interface is controlled using two types of security: Role-Based Security and Business Unit Security. For additional system security, audit logs are available to view and track edits, made within the solution.

- **Role-Based Security:** Each Commissions User is assigned a role, with differing levels of access to information.
- **Business Unit Security:** Used to separate compensation data for different parts of the corporate structure, providing another layer of security
- **Audit Logs:** Used by Commissions users to track any additions, modifications, and deletions to the Commissions Repository
- **Audit History:** Lists any changes made to a Commission object over a time period

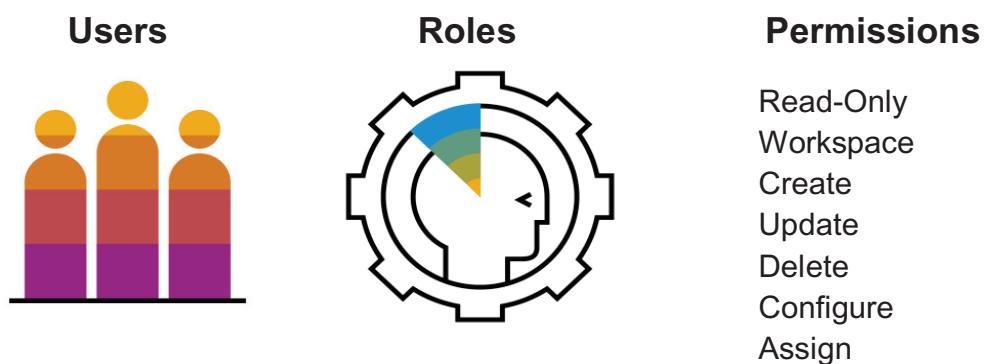
 **Notes:**

ROLE-BASED SECURITY

Commissions uses a role-based security model, which allows users access to data, based on user login and password.

Users are individuals designated to manage compensation in the user interface by viewing or editing existing data.

Assigned roles with pre-defined permissions can assist in controlling information access. A role is a group of permission settings that apply to all users assigned to that role.



ROLE-BASED PERMISSIONS

Each security role may have different levels of permission.

Permissions represent the level of access to an object or the ability to perform a specified action. For example, a security role can have read permission for Users, but not have create permission for them.

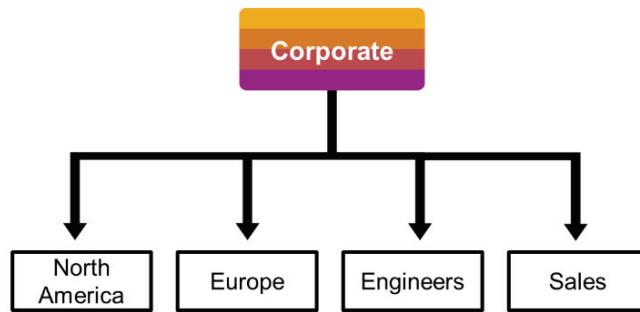
Permissions to objects or actions are grouped into permission sets. You can specify permissions for individual objects or actions, or for an entire permission set.

Permission Types:

- **Read-Only:** User can only view associated items
- **Workspace:** The user can see the workspace listed in the Control tab and can open the workspace.
 - **Note:** The user must also have read access to the associated data items. Access to the workspace is not enough to see objects in the workspace.
 - (*Automatically includes Read & Workspace permissions.*)
- **Create:** User can create new items. (*Automatically includes Read permissions.*)
- **Update:** User can make changes to associated items (*Automatically includes Read & Workspace permissions.*)
- **Delete:** User can delete associated items from the system (*Automatically includes Read & Workspace permissions.*)
- **Configure:** The user can configure plan summary templates, system preferences, and calculations.
- **Assign:** User can assign rule elements in a variable assignment box.

BUSINESS UNIT SECURITY

Business Unit security allows organizations to control access for specific departments, divisions, groups, or portions of an organization. Business Units is an optional feature used to restrict user access to data, and to segregate compensation data to maintain reports.



Key Points:

- Users can belong to multiple Business Units and their accounts can be associated with multiple Business Units to access data.
- Elements that have no assigned Business Units are visible to ALL.
- Positions are allowed only one Business Unit. Assignments to multiple Business Units are not allowed.
- Security and Global data (Users, Roles, Data Types) have no Business Units.

Note:

- When you calculate compensation, you do so for all data in the Commissions UI.
- You cannot run calculations for just one Business Unit. Compensation results data is separated by Business Unit according to the Business Unit assignment of the associated position.
- If you want to process payments for separate Business Units, you can assign positions from a Business Unit to a position group, and then process payments by position group.

BUSINESS UNIT ASSIGNMENT OPTIONS

When assigning data items to Business Units, choose from the following options:

- Assign the item (or change its assignment) to a Business Unit.
- Specify that the item is not assigned to any Business Units, and therefore viewable and modifiable by all Commissions UI users.
- Assign the item to all Business Units—all Business Units that are currently defined, and any and all Business Units that are defined in the future.

When assigning Commissions User accounts to Business Units, choose from the following options:

- Assign the User Read access to any combination of defined Business Units (one, multiple, or all Business Units)
- Assign the User Full access to any combination of defined Business Units (one, multiple, or all Business Units)
- Do not assign the User to any Business Unit. (If your organization has implemented Business Units, this option leaves just the data items that are not assigned to a Business Unit accessible to the unassigned user.)

Note:

When assigning a data item or user account to all Business Units, this assignment is effective for all Business Units that are currently defined and all Business Units that are defined after you make the assignment (all current and future Business Units).

BUSINESS UNIT AND SECURITY PERMISSIONS

To change the Business Unit assignment of an object:

- Your user account must be assigned Full access to all Business Units to which the object is assigned.
- Your user account must also have update or create access to the object itself.

To change any other properties of an object:

- Your user account must be assigned Full access to at least one of the Business Units to which the object is assigned.
- Your user account must also have update or create access to the type of object.

Create **Business Units Demonstration** note section:

 **Notes:**

AUDIT LOGS

Audit logs are available to track any additions, modifications, or deletions of SAP Commissions objects. The Audit Log also records when each user logs in or out of SAP Commissions.

Note: Imports and calculation runs are not tracked from the Audit Log. They are tracked in the Calculations workspace.

- Users can export audit log information to a CSV (comma separated value) file.
- SAP Commissions keeps audit information on any create, update, or delete operation in the system.
- In the Summary pane, SAP Commissions displays the user who made the change, the date and time that the change was made, the type and name of the affected object, and the action that was taken (create, update, or remove).
- In the detail pane, SAP Commissions shows the affected versions of the object that was created, updated, or removed.

 **Notes:**

AUDIT HISTORY

SAP Commissions tracks the history of changes to each auditable data object. Each change can be viewed in the audit history for an object. The audit history includes a record of the date of each change made to the object, along with details for the selected object.

View the audit history by clicking the Audit History button displayed in the workspace of all auditable object types.

SAP Commissions displays only the active version of data objects on the workspaces. The historical versions of an object are available in the audit history. Historical versions are marked as removed when new versions are created but remain in the database for tracking. When you view the audit history, SAP Commissions displays all versions of the selected object. You can select individual versions to see any changes in the detail view.

SAP Commissions keeps the audit history using the following attributes:

- Create Date - the date and time an object version was created.
- Remove Date - the date and time an object version was deleted.

When an object is changed, the remove date on the old version of the object and the create date on the new version are set to the date and time of modification. When you explicitly delete an object, Commissions UI sets the remove date of the most recent active version to the time of deletion.

The active record of an object is listed but displays no remove date. To find the latest version of an object (the active version), you need to search for that object in the related workspace. The Audit Log workspace searches only for historical events.

The following table lists the auditable objects by Commissions UI tab.

Organization	Plans	Classification	Results	Administration
participants	Plans	categories	orders	users
titles	rules	products	transaction, credit and deposit adjustments	roles
positions	formulas	customers		unit types
relationships	variables	postal codes		calendars
	territories	generic classifiers, if any		fixed value types
	fixed value			credit types
	quotas			earning groups
	rate tables			earning codes
	lookup tables			event types
				reason codes
				position groups

Lesson 2: Commissions Setup

Topic 7: System Preferences & User Preferences

SYSTEM PREFERENCES & USER PREFERENCES

User preferences allow the set-up and management of specific default preferences that applies to the individual user account and not to all the users in the system.



Examples include:

- Setting a default Business Unit
- Setting a question prompt before a record is deleted
- User Workspace settings

Access **User Preferences** by using this path:
Home>Manage Setup>Preferences>User Preferences

Multiple **User Preference** options are available:

- Business Unit / Processing Unit Settings
- Prompt Settings
- Default View Data
- Workspace Settings

USER PREFERENCES DEMONSTRATION

Business Unit/Processing Unit Settings: These settings control what the default Business Unit and Processing Unit is for the logged-in User. Search queries and create operations will automatically populate the queries and forms with the default Business Unit and Processing Unit.

Prompt Settings: These settings control if a confirmation prompt will be displayed to the User before delete and edit operations.

Options available:

- Prompt me before a record is deleted
 - If enabled, prompts will appear asking "Are you sure?"
- Prompt me before a record is edited
 - If enabled, a warning message dialog is displayed when the user modifies rules.

Default View Data: The default period controls what period is shown by default when the User is logged into the application. The default period can then be changed by the User.

Options available - Set my default view period to:

- Current Date Period
- Active Period
- First non-finalized period

Restoring Preference Defaults: To restore the default preferences associated with a tab in User Preferences, click the **Set Defaults** button.

Specifying A Default Business Unit: Commissions UI automatically assigns any objects created to the default Business Unit. The default Business Unit setting applies if an organization has more than one Business Unit defined.

Each user specifies his preferred Business Unit. This is not a setting that the Commissions UI Administrator can configure. A User must have full access to a business unit to specify the business unit as the default business unit.

If a Business Unit is specified as default, and the account changes, without write-access to the specified Business Unit, Commissions UI provides an alert at the next login to inform the User that the default Business Unit is now set to "No Default."

End User Preferences demonstration.

SYSTEM PREFERENCES DEMONSTRATION

System Preferences allow you to apply settings to all users in the system. Unlike the User Preferences settings, the settings you select for the User Preferences workspace, apply to the individual user account and not to all of the users in the system.

Calculation Settings:

Use Calculation Settings preferences to modify the way pipeline is run and results are calculated.

Available Calculation Settings Preference Options:

- Payment Threshold
- Maximum data log entries per error
- Path to export Pay file
- Audit logs Retention Days (0 means no purging)
- Allow negative Payments
- Generate transaction adjustments when existing transactions are imported
- Run all transactions on order
- On demand position processing
- Log warnings to database
- Generate credit to transaction summary
- Disable Org search and validation for Transaction Participant Pre-Assignment
- Search Order ID starting with term and case sensitive

Payment Threshold:

If specified, it does not generate payments that are either below or equal to value specified in this option. A Maximum payment of zero indicates that there is no threshold specified.

Maximum Data Log Entries per Error:

Displays maximum worker log entries for Message Logs workspace

Path to Export Pay File:

If the value is not given, it saves the “trialPayment” and “postedPayment” file to default location else to the specified location. Specify the path using forward slash. For example: C:/console

Audit Logs Retention Days (0 means no purging)

Audit logs will be purged after retention days are passed. Zero means no purging.

Allow Negative Payments

Specifies whether to allow negative payments to be posted. If negative payments are allowed, no balance is carried to the next period. If enabled, ensure that the system is configured to manage negative amounts. If negative payments are not allowed, negative amounts are tracked as balances after the period is finalized.

SYSTEM PREFERENCES DEMONSTRATION

Generate Transaction Adjustments when Existing Transactions are Imported

If specified, Commissions UI creates transaction adjustments when existing transactions are reimported. The Transaction adjustments display on the Adjustments tab on the Transactions workspace.

Run All Transactions on Order

If incremental mode is run and the User utilizes order-level functions in transaction credit rules, change this property to “true.” Leaving this property “false” improves performance.

On Demand Position Processing

Specifies use of on-demand position processing.

The following values are valid:

- True - Commissions UI processes just the active positions.
- False – On demand position processing is not used during calculation processing.

Log Warnings to Database

Specifies where error messages are stored.

The following values are valid:

- Commissions UI stores information and error messages in the database.
- Messages are viewable in the Message Log workspace.
- Commissions UI also populates the plain text files with the messages.

Generate Credit to Transaction Summary

The default value is set to True, the table is populated as part of the “allocate” stage, by default. Users need to set the preference, so the table will not populate as a performance improvement.

Disable Org Search and Validation for Transaction Participant Pre-Assignment

If disabled, the org fields will be text fields and Users are responsible for name validation.

Search Order ID Starting with Term and Case Sensitive

If enabled, the “type ahead search” for order ID is case sensitive and starting with term. This offers better performance.

Continue the System preferences demonstration on the next page.

SYSTEM PREFERENCES DEMONSTRATION

Reporting Settings

- Display zero valued sections in reports
- Display zero valued incentives in reports
- Display specific measurements only (Set values in Incentive.GA3)
- Display credits of specific types only (Set values in Incentive.GA4)

Display Zero Valued Sections in Reports: If set to “True”, the zero-valued sections will be displayed in compensation reports.

Display Zero Valued Incentives in Reports: If “False”, the zero-valued incentives will not be displayed in compensation reports.

Display Specific Measurements Only (Set values in Incentive.GA3): If “True”, Measurements will be reported based on the values populated in GA3.

Display Credits of Specific Types Only (Set values in Incentive.GA4): If “True”, Credit Types will be reported based on the values populated in GA4.

Payment Summary Settings

- After Calculating Payments
- After Posting Payments
- After Finalizing Payments

After Calculating Payments: If enabled, the payments summary information is generated after a calculation is run.

After Posting Payments: If enabled, the payments summary information is posted after the post stage is run.

After Finalizing Payments: If enabled, the payments summary information is finalized after the finalize stage is run.

Advanced Calculation Options

- Consolidate participant payments
- Enable Processing Units

Continue the System preferences demonstration on the next page.

SYSTEM PREFERENCES DEMONSTRATION

Consolidate Participant Payments: Enable this feature to consolidate deposit and payment information for participants assigned to multiple positions.

Note:

- If enabled, Users cannot search for related positions off a consolidated payment.
- If disabled, Users should only do so after ensuring that all balances have completely reconciled.

Enable Processing Units

Caution: Enabling this feature allows users to create processing units and associate them with business units. If enabled, it requires that users run the calculation by processing unit. After the calculation has run, using processing units, disabling the feature can cause data corruption.

Import Settings

One section of preferences is available: Import Settings.

- Maximum number of records to process per save
- Total number of errors reported
- Validate external credit allocation
- Remove prior position relationships

Maximum Number of Records to Process Per Save

The number of records to commit to the database at a time. This depends on the size of your rollback segments.

Total Number of Errors Reported

The number of allowable errors of any one type during the validation or transfer. The process terminates after the error LimitSize is reached.

Validate External Credit Allocation

Specifies for transactions that are assigned to participant, position, or title whether to check during validation that the participant, position, or title exists.

Remove Prior Position Relationships

Specifies how to handle prior relationships.

The following are valid:

- False: Commissions UI creates an additional relationship version if import of a relationship version that has effective dates that do not overlap those of the existing version.
- True: Replaces all existing versions of a relationship when an imported version of that same relationship.

Continue the System preferences demonstration on the next page.

SYSTEM PREFERENCES DEMONSTRATION

Language Support Settings

- Locales
- System Multi-Language Options

Other Configuration: Allows Users to Hide/Show some Document Information, set Conditional Block Count or Defined Plan Document custom style.

Available Other Configuration Options:

- Hide Comment Option
- Hide Management Feedback
- Hide Currency
- Choose Unit Type for Currency
- Customer's Conditional Block Count
- Plan Communicator Document CSS

Hide Comment Option: Restricts Users from inserting comments while performing approve/accept action by hiding the comment box.

Hide Management Feedback: Allows Users to hide feedback in distribution history.

Hide Currency: Allows Users to hide currency in distribution documents.

Choose Unit Type for Currency: Allows Users to choose currency unit type between currency symbol (\$) and standard currency (USD).

Customer's Conditional Block Count: Used to control the number of Conditional Block added in document template.

End of System Preferences Demonstration

Lesson 2: Commissions Setup

Topic 8: Customizations

CUSTOMIZATIONS OVERVIEW

The Customizations workspace is used to customize the SAP Commissions user interface. SAP Commissions offers default fields for records that may not meet the needs of your organization's compensation plan. In this workspace, new fields may be added, and names of existing fields may be customized.

For example, participants can be changed to payees. In the insurance industry, participants can be changed to brokers.

Access Customization Workspace

Administrators and Users, with permissions, can access the Customizations workspace under the Preferences section, from the Manage Setup card to:

- Change the name of existing fields
- Create additional classifier types
- Indicate fields as PII to comply with GDPR regulation
- Manage and create attributes
- Rename objects and their attribute fields
- Set labels to different locales

As the needs of an organization change, applying customizations will be an important step for completion, prior to importing data, so incoming fields can be mapped to the new fields in SAP Commissions.

Notes:

GENERAL DATA PROTECTION REGULATION (GDPR)

GDPR is the short term for the EU's General Data Protection Regulation. It constitutes the leading applicable data protection law in Europe and entered into force in May 2018. As a so-called "regulation", it directly applies in all member states of the EU.

The regulation also applies to controllers or processors which are outside the EU when they process personal data about people who are in the EU.

The GDPR is infamous mostly because of its strict regime of fines and other negative legal consequences if companies fail to comply with its rules.

GDPR defines data management requirements:

- Personal Identifiable Information
- Purging requirement, process and logs

Notes:

PERSONAL IDENTIFIABLE INFORMATION

Personal Identifiable Information (PII) can identify an individual, when used independently or with other relevant data.

Sensitive:

- Full Name
- Social Security Number
- Driver's License Number
- Mailing Address
- Credit Card Number

Non- Sensitive:

- Zip Code
- Date of Birth
- Gender

This type cannot be used alone to determine an individual's identity.

- Mark participant fields as PII in the Customization workspace
- View read-access logging related to sensitive PII in the Logs workspace
- Set audit log retention days in System Preferences
- Set data protection policy settings in Global Settings
- Initiate a purge process of personal data
- Block certain payees or Administrators from being purged in User Administration
- Set GDPR related email notification in the Process Configuration workspace

Notes:

CUSTOMIZATIONS

Managing locales, objects and attributes

You must have the appropriate security permissions for a workspace and its objects to view, create, and modify in the Customization workspace.

Customize Locales

Locales define a user's language, country, and any special preferences defined for the user interface. You specify the labels to use when SAP Commissions is open with browsers to different locales. For example, if *French* is selected as a locale, determine the labels to use when SAP Commissions runs on a browser using a *French* locale. If a locale is not selected, a customization can be used as a default locale.

Note: Always check to ensure that the necessary locales are defined in the System Preferences dialog, prior to customizations.

 **Notes:**

CUSTOMIZATIONS DEMONSTRATION

Rename Objects and Attribute Fields: After locales are specified in System Preferences, objects and attributes may be renamed in the Customizations workspace.

Renaming the Display Name or Plural Display Name attributes for a workspace changes the names for that specific workspace.

Managing General Data Protection Regulation (GDPR) in Customizations: To manage GDPR, it is recommended that Administrators mark participant fields as PII (Personally Identifiable Information). It is suggested to mark the tax ID field as Sensitive PII.

Enable or Disable Object Attributes: When an object is selected for customization, SAP Commissions lists the attributes associated with the object. Custom fields are called generic attributes. Below are types of generic attributes:

- Generic Attributes (GA) - fields that contain text entries
- Generic Numbers (GN) - fields that contain only numeric entries
- Generic Dates - fields that contain date entries
- Generic Booleans - fields that contain Boolean entries (True/False, Yes/No)

The Active column shows active and displayed attributes. To activate generic attributes for a specific workspace, check the box next to the attribute. When naming new generic attributes, always begin your naming convention with GA or GN.

Specifying Extended Attributes: If all generic attributes are used, more attributes can be added for Participants, Positions, Transactions, and Orders. First, use the default generic attributes that are available, specifically if using these attributes for rule calculation. SAP Commissions displays a warning message, describing possible performance issues when adding more attributes.

Note: The use of additional attributes may affect calculation processing. Using primary and generic attributes are suggested, especially for attributes accessed frequently during processing. The time it takes to save changes may be longer when adding more attributes.

Creating Classifier Types: The Customizations workspace contains predefined classifier types such as Customer, Postal Code, and Product. You can create an unlimited number of user-defined classifier types to meet your organization's needs. Labels can be customized for each field, on each type of user-defined classifier.

Note: You cannot delete classifier types.

Lesson 2: Commissions Setup

Topic 9: Data Integration

DATA INTEGRATION

SAP Commissions processes data such as payee names, ID numbers, and transactional information to calculate accurate payments.

For example, payees enter their sales transactions into their specific CRM tool. The transaction data is integrated into SAP Commissions, where the payments are then calculated. This step is considered as the Data Integration portion of the Commissions process.



Notes:

PROCESS INTEGRATION VS. DATA INTEGRATION

The purpose of data and process integrations is to move data from the source system to the target system. However, the volume and frequency of the data are characteristic differences between data integrations and process integrations.

With process integrations, the volume is small, but frequency is high. Small messages are sent through the system. This integration is mostly done in real time. For example, an opportunity is created in one system and immediately you want to create a sales order in another system, the data is transferred instantly.

With data integrations, there is high volume of data transfer from one system to another. Relatively, data transfers happen less frequently. Most of the time, the data transfer is not in real time but scheduled sometime later. Data integration has a specific need and requires tooling to accomplish the work.

Notes:

DATA INTEGRATION TOOLS ON HANA

Millions of transactions are processed with every pay period. The data originates from various systems. To assure accuracy of the Commissions run, the data may need to be normalized and cleaned. Data Integration tools perform these processes.

DATA INTEGRATION TOOLS ON HANA

- Excel Data Loaders
- Commissions Data Loaders (CDL)
- Smart Data Integration (SDI)
- Cloud Platform Integration (CPI) or Connect Enterprise
- REST APIs

Excel Data Loaders are used for adhoc integration and routine data management. It is not designed for high volume data transfers but is offered as default.

The Commissions Data Loader is a new tool that is delivered with Commissions at implementation. This tool is designed for high volume of data transfers. The data transfer is completed with HANA procedures which requires technical understanding to write stored procedures.

Smart Data Integration is designed for high data volume and data transformation. It uses Web Integration Development Environment, Web IDE, a graphical tool, used to define certain flowgraphs for data transformations. Flowgraphs may also be scheduled for transitions from system 1 to system 2. Web IDE requires technical expertise to accomplish data integrations.

SAP Cloud Platform Integration and Connect Enterprise handle similar use cases. Both tools connect applications to transfer data from one system to another. CPI is available through SAP Cloud Platform, whereas Connect Enterprise requires additional licenses.

REST APIs are new configured APIs. Previously, SOAP APIs were used. Typically, they are used for smaller volumes of data, with real-time integration.

Note: Customers may choose the appropriate tool with the direction of the SAP Implementation Teams and their IT departments.

CAPABILITIES OF INTEGRATION TOOLS

Data Integration Solutions	Excel Data Loaders	Commissions Data Loader (CDL)	Smart Data Integration (SDI)	SAP Cloud Platform Integration or Connect Enterprise	REST API
Use Case	Routine data management	High volume batch load	High volume load with data transformations	API to API integration	Custom API client
User Type	Business	Technical	Technical	Technical	Technical
Frequency	Ad Hoc	Ad Hoc or scheduled drop	Scheduled or real-time	Scheduled or real-time	Real-Time
Data Volume	< 1,000 rows	Up to 5 Million rows or 1 GB data per drop file	Higher Volume than CDL	1,000 to 100,000 rows	< 1,000 rows per call
Data Transformations	None	HANA stored procedures	Flowgraph based transformations	Integration flow-based transformations	None
Connectors	None	None	Built-in adapters / connectors for source systems	SAP Cloud Platform marketplace	None
License	Included in Core Commissions	Included in Core Commissions	Included in Core Commissions	Need additional license	Included in Core Commission

LESSON 2 REVIEW

In this lesson we reviewed the following objectives:

- Reviewed the Sales Performance Home Page
- Provided an overview of various SAP Commissions workspaces and toolbars
- Discussed Global Values
- Defined Calendars and Default Periods
- Reviewed Processing Units and its functions
- Reviewed Business Unit security and Role based security
- Demonstrated how to utilize System Preferences and User Preferences
- Discussed the Customizations workspace and functions
- Reviewed data integration

Notes:

Lesson 3: Organizational Data

LESSON 3: ORGANIZATIONAL DATA

Lesson 3 Objectives

- Discuss Effective Dates and Versioning
- Define Organizational Data
- Discuss Position Assignments
- Review Search tools

Lesson 3: Organizational Data

Topic 1: Effective Versions

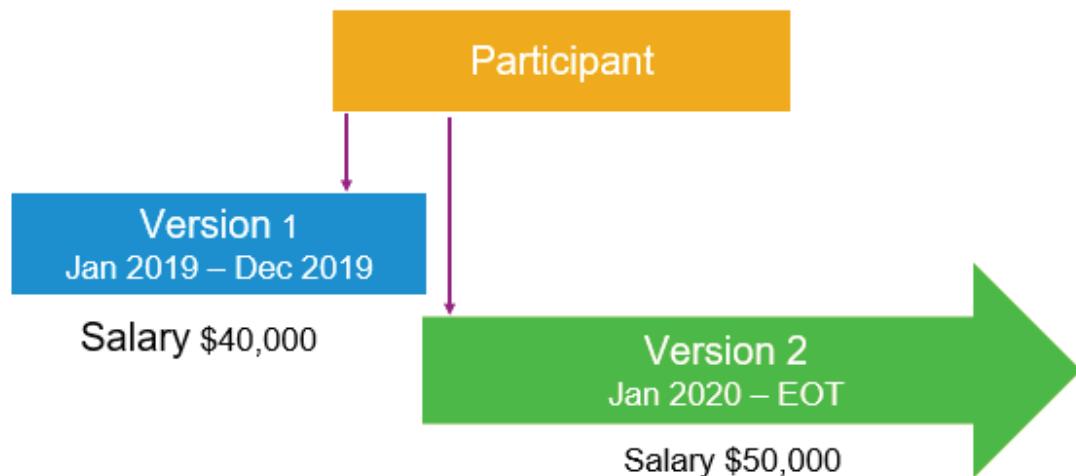
EFFECTIVE DATES

Overview of Effective Dates and Versions

The effective date range of an object's version is determined by the start and end dates of that version. Effective Dates set the date range within which an object's version is active or valid in the system. Objects tracked by effective date include all reference data (organization data, classification data, plan date and rule elements). Effective dates are one of three ways that SAP Commissions uses to track objects. The other ways are audit date and calculation run date.

Specifying the Effective Dates of a New Object

When you create new objects, you are creating the first version of that object. If necessary, you can create new, additional versions of the object. Creating new object versions retains the old versions for auditing purposes.



AUDIT HISTORY OF AN OBJECT

You can view the history of changes made to an object. Objects tracked by audit history have an *Audit the selected object* icon in their workspaces. You cannot view changes to quota values or lookup table values using Audit History from the Quotas and Lookup Tables workspaces.

 **Notes:**

CREATING A NEW VERSION OF AN OBJECT

If the change you are making is newly effective and effective over a span of time, creating a new version of an object:

- Retains old versions for auditing purposes
- Makes it possible to track what version was effective at a particular point in time

If you change the effective dates of an existing version of the object.

- Ensure items that refer to that object are still valid if you change effective date range

The Manage Versions icon allows you to create new versions of a record/object and edit existing versions. The Manage Version icon is located in the Summary Pane toolbar.

Note: Because versions are handled differently for Position Groups, Relationships, Quotas, and Lookup Tables, these workspaces do not have Manage Version icon. Also, period-based fixed values do not have the Manage Version icon.

Notes:

EDITING A VERSION OF AN OBJECT

You should edit the current version of an object if you need to make a change to only that version.

The list of versions in the summary pane on the left allows selection of a specific version.

Note: You cannot change object attributes over multiple versions associated with an object's logical key (the logical key is what defines the object as unique from other objects of the same type).

 **Notes:**

END DATING AN OBJECT

If you have an object that is no longer active but cannot be deleted, you can change the effective end date of the last version of that object to a specific date.

The following rules apply to end-dating participants and positions:

- If a participant has non-zero results data, you cannot end-date the participant or position.
- You can end-date a position or participant version if there are **no** results data associated with that version.
- If the Credit Start, Credit End, Process Start and Process End fields on a position version extend beyond the effective end date of that version, the position continues to be processed.
- If you end-date a position or participant that has associated zero-value results data, these results data objects display with a position of <unavailable> in SAP Commissions.

Notes:

EFFECTIVE DATES AND VERSIONING BEST PRACTICES

- Always use versioning to maintain changes over time of an Organization and changes over time for how Plans should calculate.
- Plans and all Plan Objects should only be versioned on a Leaf Period Boundary
- Always version your Organizational data on a Leaf Period Boundary. You can use Generic Dates to store specific dates that are needed in Rule logic. For example: If a Payee is hired on January 15th. The effective start date of the Participant should be 1/1/2019, but the Hire date can be 1/15/2019. Any rules can reference the Hire Date field to determine eligibility. Likewise, their Position should be effective from 1/1/2019, but their GD01: Start on Position date could be 1/15/2019, or the custom crediting dates can be used to start crediting on 1/15/2019.
- Do NOT end date a Position, instead deactivate it. This is particularly important if a Position can ever be reused in the future (For example, Participant is re-hired). To deactivate a Position, create a new version and remove the participant from the Position. In addition, you can change the Title to a Title that is Not assigned to a plan.
- If a Rule is not being used anymore, decide if it will never be used again, or if it could later. If it will never be used, you can end date it. If it could be used again, just version the Plan/Component, and remove that rule from the object from that point forward. If you remove it from a Plan/Component for periods that have already been run, you will want to then run a remove stale results with your next pipeline for that period to remove the default data from this rule.
- Always clarify the Effective Start date of any requested change into a system before making it. Sometimes an organization may want it to be retroactive to the start of the year, or sometimes they may want it to start in Q2.

MANAGING VERSIONS DEMONSTRATION

 Notes:

Lesson 3: Organizational Data

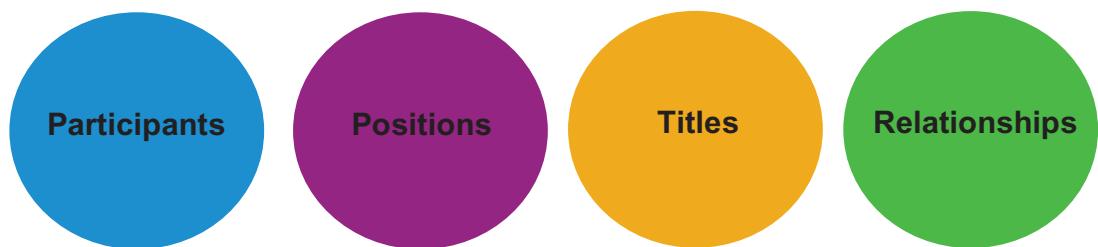
Topic 2: Organizational Data

ORGANIZATIONAL DATA INTRODUCTION

Organizational data includes Participants, Titles, Positions, and Relationships.

During the implementation, organizational data is imported. As an organization changes over time, it will be necessary to create and modify organization data. These changes may include adding or removing participants, creating new positions, or changing the reporting structure when people transfer within departments, receive promotions, or leave the company.

In SAP Commissions, organization data:



Participants	Participants are the payees. This can be individual people or entities that are included in incentive compensation programs within an organization. This can also include people or organizations that have access to compensation related reports but are not receiving compensation payments.
Positions	A Position is a unique job role in an organization. Positions may exist in SAP Commissions with or without association to a Participant.
Titles	A Title is used to group Positions that are compensated in similar ways across the organization. Because of this, companies often assign compensation plans by Title.
Relationships	A Relationship is the association between two Positions used to process rolled credits.

PARTICIPANTS DEMONSTRATION

Participant Workspace

The Participant Workspace consists of the Payee Summary and Payee Details for each Participant. The Payee Details include General Information and Custom Fields. Information pertaining to a Participant may be stored in this workspace.

General Information for Participant includes the following:

- First and Last Name
- Payee ID
- User Name
- Base Salary
- Hire and Termination Dates
- Custom Fields

Note: Last Name and Participant ID fields are required fields.

Every Participant in the SAP Commissions system will need an assigned User Name.

The User Name is what the user utilizes to login. The User Name can NOT be modified after the Participant record is saved/created. This is true for data loaded with participants as well.

(Not recommended) If the record is saved or loaded without populating the User Name field, the record will automatically populate the User Name with the Participant ID. If the user plans to utilize SSO (Single Sign On) the User Name should be the Company's user ID currently used.

- Custom fields allow an organization to store additional Participant information as deemed necessary.

Multiple types of Custom Attributes fields available:

- **Text:** String attributes available for storing alpha-numeric information.
- **Numeric:** Number fields available for storing numeric amounts, including currency, percent, integer or quantity.
- **Date:** Date fields available for storing dates.
- **Boolean:** Fields available for storing true or false.

Note: Custom fields are available for use within Rules, Rule Elements and Formulas and are created within the Customization workspace in SAP Commissions.

CREATE PARTICIPANT DEMONSTRATION

 **Notes:**

MODIFYING A PARTICIPANT

Most information for a participant can be modified, including the participant's Business Unit.

The user's Role must have Update permissions for Participant Name and Participant Terminate to modify the participant's Name or Terminated date.

Similarly, to modify the participant's Base Salary and Tax ID number, update permissions for Private Data must be present, in addition to update permissions for Participants.

Note: If the version of the participant, that must be modified, is not currently displayed, select the current version and click *Edit Version* to open the *Versions for Object* dialog.

Notes:

TERMINATING A PARTICIPANT

When a participant leaves your organization, you can terminate that participant. Terminating a participant involves setting the terminated date on a version of the object, normally, the latest version. Adding a terminated date to one version, adds it to all versions.

Terminating a participant does not affect commission calculation processing for that participant. Compensation processing for the participant continues. This is useful when a participant should continue to receive credit and compensation for sales with or without annual bonuses completed before the termination date.

If compensation for the participant should no longer be processed or only processed to a specific date, the participant's position assignment custom processing dates must be changed.

If the participant is no longer considered active but should remain in the SAP Commissions Repository, the participant should be removed from all Positions from the date they became inactive forward. It is helpful to make a GA on the Participant to state that STATUS to easily exclude them from the default view in the Participant workspace.

Note: The Terminated field is provided in accordance with your Human Resources system, which determines the manner in which the last date of a participant is recorded at your company.

Notes:

DELETING A PARTICIPANT

You can delete a participant that does not have any associated results data. For example, you can delete a participant that was just created either manually or by import, even if the participant has been assigned to one or more positions. (If the participant was assigned to a position(s), you would first remove them from those positions.)

You cannot delete a participant that has associated results data.

You also cannot delete a participant if that participant is assigned to a position and there are other SAP Commissions objects (such as any credits, measurements, and so forth) that are associated with the position assignment. In both these cases, you should consider end dating it instead. In the case of Participants, the results data would be credits.

Deleting a participant removes the participant object from the SAP Commissions Repository. However, the audit log in the Audit Log workspace retains information on the actions performed on the participant object, including its remove (delete) date, and information about the object itself.

If the participant is pre-assigned to a transaction, it is recommended that you remove the pre-assignment before the participant is deleted.

If the payee pre-assignment is not removed, a warning occurs when running the calculation, but the calculation continues to process.

 **Notes:**

PARTICIPANT BEST PRACTICES

- Determine the User Name/User IDs format before loading/creating ANY Participants in the system.
- Do not use a User Name/User ID that may change, for example, a person's Name.
- With SSO, use the User ID utilized by the Company's current systems.
- Termination Date automatically disables a user from receiving access into the portal (even if accidental) and requires a support ticket to be re-enabled. (Deleting Termination date does not re-enable). It is recommended to use a Generic Date to represent the end of the Participant's computation and use this date in rule logic.
- End-dating Participants is **not** a recommended. Especially if someone is eligible for re-hire. Instead, use a Generic attribute for Status, and set the Status to TERM. Then, have the default filter for Participant workspace to avoid displaying the TERM Status.

Notes:

TITLES

Titles are used to group similar positions across the organization and usually group positions related to job functions.

As an example, “Sales Representatives” in an organization might share the same title, but each sales representative may hold a unique position.

Because positions, related by title, are generally compensated in the same way within an organization, companies often assign compensation plans by title.

Note: Titles can be imported.

Notes:

CREATE A TITLE DEMONSTRATION

The Detail pane of the Titles workspace contains core tabs: General Information and Assignments. If custom attributes have been enabled for Title, a custom fields section is also displayed within the Titles details view panel.

The General Information tab contains the Title Name, Business Unit assigned to the Title, and a description field to further define the Title.

Best practice: Title names should not be the same as Position names. Position and Title names should be unique.

The Plan field can be used to assign a default compensation plan to all positions sharing a title and to view the plan assigned to the title. Plan assignment by title is the recommended method for assigning plans.

Notes:

TITLE BEST PRACTICES

- Do not allow Titles and Positions to hold the same name.
 - DO NOT change the name of a Title over time.
 - Assign a compensation plan to a Title.



Notes:

POSITIONS

- Positions define specific jobs that participants perform within a company.
 - There is a position for each participant.
 - One participant can have multiple positions.
 - At a given time, one Position will have only one Participant.
 - Positions may exist in SAP Commissions with or without association to a Participant.
Each position in SAP Commissions is grouped under a job title.



Notes:

CREATING POSITIONS DEMONSTRATION

 Notes:

POSITION ASSIGNMENTS (Participant Position Assignments)

In SAP Commissions, you create a *position assignment* by assigning a participant to a specific position for a specified duration of time. SAP Commissions calculates variable compensation for the position assignment. During the compensation process, credits, commissions and bonuses, and deposits are allocated to position assignments. Position assignments (also called position relationships) can also be imported.

 **Notes:**

DATE CONSTRAINTS FOR POSITION ASSIGNMENTS

There are date constraints for assigning participants to positions:

- Unless you use a transition position, effective date ranges cannot overlap a given position assignment. Only one participant can be assigned to a position at a time, however, a participant can be assigned to multiple positions at a time.
- Direct credits are created according to the associated transaction's compensation date, if the transaction's compensation date is within the effective date range for the position version and Credit start and Credit end dates are specified. The credit's compensation date is the transaction's compensation date.

These dates become important when deciding or analyzing where credits are created and processed.

Note: To process unoccupied positions, use a "Dummy Participant" as a placeholder.

Notes:

DELETING A POSITION

You can delete a position that was just created either manually or using import. You cannot delete a position if that position has associated results data. In this case, you should consider end dating it instead. Deleting a position removes the position object from SAP Commissions. However, the audit log in the Audit Log workspace retains information on the actions performed on the position object, including its remove (delete) date, and information about the object itself.

Note: To delete a version of a position, use the Manage version on the toolbar. If the position is pre-assigned to a transaction, it is recommended that you remove the pre-assignment.



MODIFYING A POSITION

Attributes of a positions that can be modified:

- Name
- Description
- Target compensation

Note: As a best practice, position names should not be the same as title names. Title and position names should be unique. You should keep this in mind when renaming a position.

Restrictions for other attributes of a position:

- **Title, Manager, and Payee:** ONLY objects that do not break business unit integrity
- **Position Group:** ONLY position groups that belong to the same processing unit
- **Business Unit:** of the selected version of a position can be modified, if the following are true:
 - There are no associated calculation results associated with the selected position version.
 - The business unit selected must be associated with the same processing unit as the business units assigned to the other versions of the position. In other words, different versions of a position can have different business units if all the business units are associated with the same processing unit.

 **Notes:**

EDITING THE EFFECTIVE DATE OF A POSITION VERSION

You can edit the effective dates for a position version if you have associated calculation results. The new effective dates must correspond to the calculation run dates. In other words, at least one position version must have effective dates that cover the calculation run period.

Removing a Participant from a Position

Removing a participant from a position is the same as ending the association between the participant and the position.

Participants Transitioning in and out of a Position

SAP Commissions provides custom credit and calculation processing dates when a participant leaves a position.

Notes:

POSITIONS

Guidelines for Using Position Credit Start, Credit End, Process Start, and Process End

When working with Credit Start, Credit End, Process Start, and Process End dates, keep the following facts in mind:

- The processing start date has been within or equal to the effective start date of the position.
- The processing start date has to be before (cannot be the same as) the processing end date.
- The effective end date of the position has to be the same or after the processing end date.
- The credit and processing end dates can extend after the position's effective end date only if the next position version is associated with a different or no participant.
- Credit processing dates must be within the range of position processing dates.
- Credit Start, Credit End, Process Start and Process End dates cannot begin before the effective date of the position. Credit Start, Credit End, Process Start and Process End dates begin after the position's effective date.

The following table summarizes how the Credit Start, Credit End, Process Start and Process End dates (Receiving Credit and Is Processing) affect the position processing.

Receiving Credit enabled	Is Processing enabled	Effect
x	x	<p>The position assignment receives credit, and payment is calculated for it.</p>
	x	<p>The position does not receive any new credits, but existing credits are processed.</p> <p>Note: If you are creating a manual credit or importing a credit and the credit's compensation date is within the position's processing dates but outside the position's credit dates, SAP Commissions issues a warning and allows the credit to be created.</p>
		<p>The position assignment is disabled. Use this combination to retain the position assignment even though no participant is currently assigned to it.</p> <p>To terminate a position assignment, you must assign it an effective end date. Examples are included in the following sections.</p>

POSITIONS

Receiving Credit and Is Processing: Interactions

Note: If you have modified Credit Start, Credit End, Process Start, and Process End dates, you can specify Is Processing effective dates and not specify Receiving Credit effective dates. However, if you do not specify Is Processing effective dates, you cannot specify Receiving Credit effective dates.

Direct credits are processed, based on its transaction's compensation date. Rolled credits are processed based on their source credit's compensation date.

The following are examples that cover special cases of positions with Credit Start, Credit End, Process Start, and Process End dates.

Notes:

EXAMPLE: PARTICIPANT REPLACED IN A POSITION

Melissa is leaving a position, and Mona is replacing her. Melissa should receive credits and payments for fifteen days after she leaves the position, during which time both participants should receive credits and payments. Melissa is assigned to Position A with the following effective dates:

- Position A version #1 effective: 01/01/2019 to 02/28/2019
- Position A is receiving credits effective 01/01/2019 to 03/15/2019
- Position A is processing effective 01/01/2019 to 03/15/2019

Mona is assigned to Position A with the following effective dates:

- Position A version #2 effective: 03/01/2019 to End Of Time
- Position A is receiving credits effective 03/01/2019 to End Of Time
- Position A is processing effective 03/01/2019 to End Of Time

In the March 2019 period, both Melissa and Mona receive credits based on transactions with compensation dates between 3/1/19 and 3/15/19. For transactions that have compensation dates between 3/16/19 and 3/31/19, only Mona receives credits.

For Melissa's position assignment, Credit Start, Credit End, Process Start, and Process End dates (custom processing dates) are specified. For Mona's position assignment, no Credit Start, Credit End, Process Start, and Process End dates (custom processing dates) are specified; the credit and processing dates inherit the effective dates from the position.

 **Notes:**

POSITIONS BEST PRACTICES

- Determine the best format for the Position Naming Convention based on your overall Design. Best Practice is to **NOT** change Position Names over time. The Position Name is the unique key identifier for a Position. Errors can occur in the UI, if you version/change the name of such items as, variable assignment loads, quota loads, reports, and pipeline results.
- Using Custom Credit/Processing dates should only be used for exceptions. If it needs to be modified regularly, automated loads that are programmed to set the dates appropriately is highly recommended. Otherwise, Position maintenance can become overwhelming.
- End Dating Positions is NOT recommended. Instead, it is recommended to deactivate them. For example, remove the participant from the Position from a month forward, and/or move the Position to a Title “Unassigned” that is not on a Plan. This allows you to reuse that Position if someone is rehired, or if someone else fills that role later. But in the meantime, it does not count toward your contract count of Active Participant/Positions.
- Don’t assign Positions directly to a Plan (only in rare exceptions), let them inherit the Title’s plan.
- Set up Position Groups for your Positions from the start, so that if you ever need to, you can Post and Finalize by a Position Group. Position Groups should not be groupings that would change frequently. Country regions is a common example, APAC, EMEA, NA, LA etc.

Notes:

RELATIONSHIPS

A Roll Relationship is an association of two Positions that is used by SAP Commissions to process rolled values. When a Roll Relationship is created, the Roll type, the Source Position, and the Receive Position must be specified. Dates, for which the relationship is in effect, can also be specified.

As you create positions in the Positions workspace, SAP Commissions automatically creates a Roll type called reporting. This Roll type mirrors your organization's reporting structure and credits are allocated accordingly. For example, a sales manager can receive commissions based on a subordinate salesperson's sales transaction credits. In turn, these credits from which commissions are calculated are typically Rolled up to the manager's manager.

Companies use Roll Relationship to roll Credits, Measurements and Incentives from one Position to another. This will be discussed further in the Compensation Plan module. The most common structure used to roll credits is the Reporting Hierarchy. It is also common to have values roll from one Position to peer or other vertically aligned Positions. SAP Commissions provides flexibility to create Roll Types for these and more complex roll relationship variations.

Note: The Reporting Roll type is internal and is not displayed in the Relationships workspace. It can be selected and used when creating credit rules.

As a best practice, you should create another Roll type that mirrors your reporting relationships and then make any additions or changes to the copy. Creating a separate Roll relationship that parallels the reporting structure, allows the flexibility to change Roll relationships without compromising the reporting structure.

As an example, create a Roll type named "Rollup" and create relationships between each position that mirror the reporting structure.

In the Relationships workspaces, you can create additional Roll types and reporting relationships. This might be required because organizations often compensate people outside the sales team. It is common to have credits Roll from one person to a peer (sometimes called Rollover Roll type). Relationships can also be imported.

RELATIONSHIPS WORKSPACE DEMONSTRATION

The Relationships workspace has two views: table view, tree view. In Relationships workspace you can create, edit, audit and delete Roll types and Roll relationships and find positions that are the sources and receivers of Rolled credits.

In table view, you can work with relationships, but not Roll types.

In the tree view, the Relationships workspace shows the Roll relationships between positions in the left panel of the Relationship Viewer and Sources and Receivers to the right. The Relationships workspace is dynamic and changes depending on the objects selected. In other words, if you select a Roll Relationship Type, the panel displays the fields for the relationship. The tree view displays the number of positions attached to a node. The following figure shows the Relationships workspaces in the tree view with Roll type details.

DELETING A ROLL TYPE

- You can delete a Roll type that has not been used.
- You cannot delete a Roll type that is referenced by a relationship or used as a function parameter in a function within a formula.
- To delete a Roll type, you must first remove all references to it.

 **Notes:**

RELATIONSHIP BEST PRACTICES

- Create a copy of your Reporting Hierarchy in a Custom roll relationship, ONLY IF you know there are situations, in your company, where the “Manager” receiving credits from the subordinates is not always the same as the Manager viewing the Performance of those subordinates. The Reporting Hierarchy in the Commissions system controls the report security.
- Using Lots of roll relationships can cause an increase in maintenance. If you need many, then defining a process for maintenance using ODI templates is a good idea.

 **Notes:**

QUESTIONS TO CONSIDER

Determine the Organization Design that best meets the business rules and requirements for transitions in the company's sales organization.

- Does the organization want to Re-use Positions, and maintain the movement into and out of positions of different Participants? Or does the organization want the Position to be specific to the Participant, when they leave the Position is activated?
- How is the onboarding of new Participants going to be done? Manual/Automated?
- How is the shifting of roles or promotions, or leaving the sales organization going to be handled?
- What are the policies for Terminations? Is the organization obligated to pay out to the end of the month, quarter, 90 Days, or stop immediately?
- How will offboarding of Participants be handled? Manual/Automated?
- How will changes in the Organizational Structure be handled? Manual/Automated?
- How will exceptions like Leave of Absence (LOA) etc, be handled? What are the business policies?

Notes:

Lesson 3: Organizational Data

Topic 3: Search Options

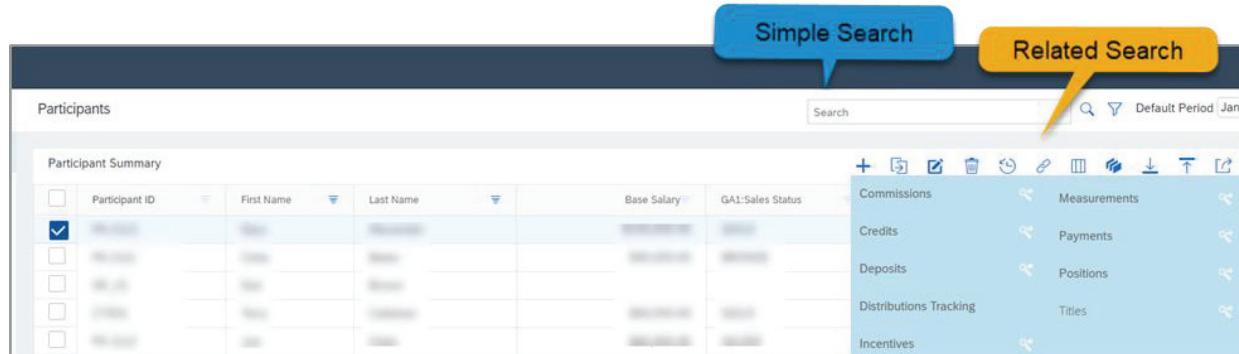
SEARCH OPTIONS

SAP Commissions offers multiple search options. Simple Search, Related Search, and Advanced Search options are similar, with quick access to compensation and result data, for research purposes.

Simple Search

To use Simple Search, click the magnifying glass. Enter text in the Search pane and click the Search button. SAP Commissions will automatically query your data, based on the key fields associated.

A Simple Search will only find objects in the current workspace. If records do not display, ensure the Default Period is correct.



To refresh your results, delete the string in the search box and search using the empty field.

Related Search

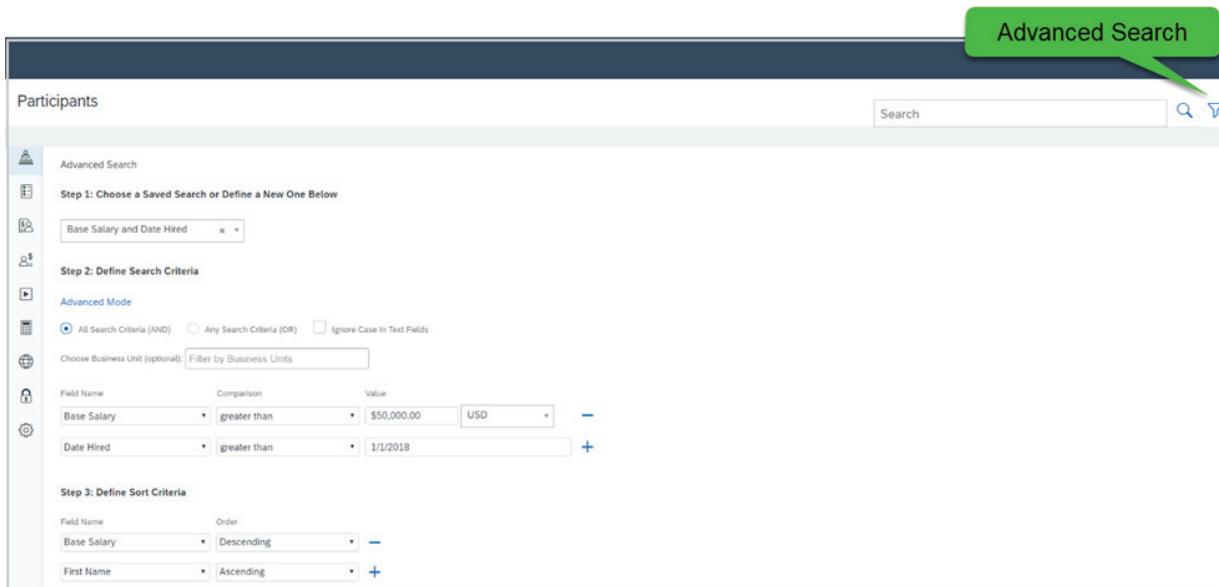
Related Search enables you to find data, related to the objects selected, in the Summary pane, in a quick and efficient manner. The Related Search method only finds objects directly related to a selected record.

You can click on the listed items in the Related Search drop down menu that displays in the workspace. Objects not directly related will not be shown.

SEARCH OPTIONS: ADVANCED SEARCH

Advanced Search

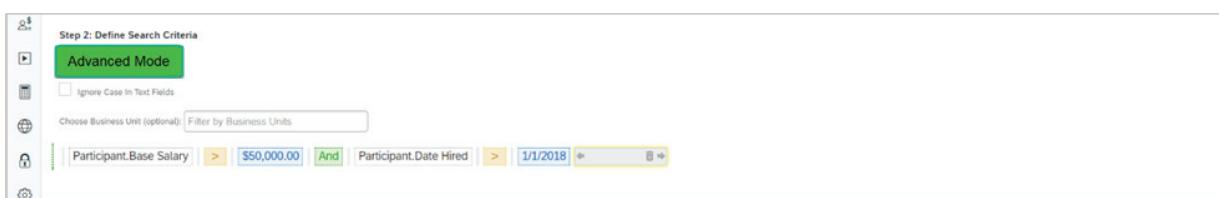
Advanced Search offers specific and detailed search functionality in all workspaces, with the exception of Calendars and Customization. You can select a Saved Search or create a New Search. Next, define the search and sort criteria to produce search results. The available fields are based on the workspace from which the search is launched.



The screenshot shows the 'Participants' workspace with the 'Advanced Search' button highlighted by a green callout. The interface is divided into three main sections: Step 1 (Saved Search selection), Step 2 (Search Criteria definition), and Step 3 (Sort Criteria definition). In Step 2, 'Advanced Mode' is selected, and search criteria for 'Base Salary and Date Hired' are defined using 'All Search Criteria (AND)'. The search results show two entries: one for a base salary of \$50,000.00 and another for a date hired of 1/1/2018.

Advanced Mode Search

In Advanced Search, Advanced Mode uses SQL-like syntax to perform a search that requires two or more tables to be logically joined. The field names for this option are based on the workspace. Some of the elements in Advanced Mode will show features found in the Formulas workspace.



This screenshot shows the 'Participants' workspace in Advanced Mode. The search criteria are defined using logical operators ('And') and field names ('Participant.Base Salary' and 'Participant.Date Hired') separated by comparison operators ('greater than' and '1/1/2018'). The 'Advanced Mode' button is highlighted by a green callout.

As you build your search expressions, using Advanced Mode, selected literals display in blue text (font) and selected data fields display in black text (font) in the Edit pane.

COMPLETING A SIMPLE SEARCH & RELATED SEARCH DEMONSTRATION

 **Notes:**

ADVANCED SEARCH DEMONSTRATION

 **Notes:**

LESSON 3 REVIEW

In this lesson we reviewed the following objectives:

- Discussed Effective Dates and Versioning
- Defined Organizational Data
- Discussed Position Assignment
- Reviewed Search tools

 **Notes:**



Notes:

Lesson 4: Classification Data and Compensation Elements

LESSON 4: CLASSIFICATION DATA AND COMPENSATION ELEMENTS

Lesson 4 Objectives

- Define Transactions and Orders
- Review Classification Data
- Demonstrate how to create a Classification Hierarchy
- Define each Compensation Element

Lesson 4: Classification Data and Compensation Elements

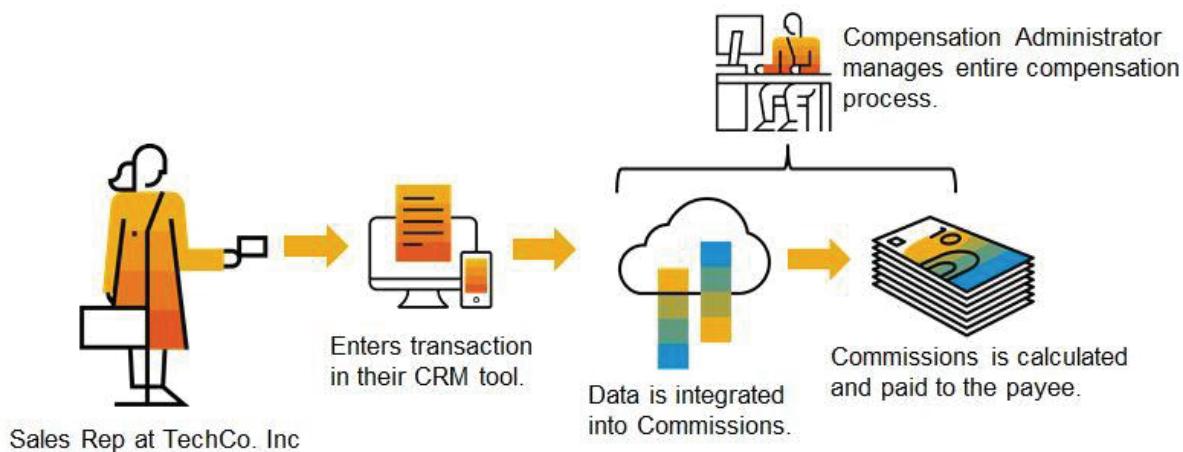
Topic 1: Transactions and Orders

TRANSACTIONS

A transaction contains all the details of a sale, such as:

- What was sold?
- Who it was sold to?
- Sales rep information
- Where it was sold?

The transaction is a base unit for compensation processing. A Transaction is grouped by an Order ID. Multiple transactions may exist within one order.



Data fields, within transaction data, determine how payees are credited.

Notes:

TRANSACTIONS AND ORDERS

Transactions contain data fields such as dates, product name, product ID, etc.

Order	Line	Subline	Event Type	Comp Date	Value	GA01: Product ID	GA02: Region
TXN_0001	1	1	Revenue	11/1/2018	1000 USD	9000	WEST

Transaction unique identifiers:

- Order ID
- Line Number
- Subline Number
- Event Type

If a transaction, with the same unique identifiers as another transaction, is loaded into SAP Commissions, the transaction will be identified as a duplicate transaction.

SAP Commissions will either update the existing transaction, **or** error upon import. It depends whether you are importing new and modified transactions, **or** only new transactions.

Comp Date is not part of the unique Identifier. If new and modified transactions are loaded and a record shares the same unique identifiers, however, has different compensation dates, Commissions will update the existing record with the new comp date.

Notes:

Lesson 4: Classification Data and Compensation Elements

Topic 2: Classification Data

CLASSIFICATION DATA

Classification data is used to organize transactions in a meaningful way. This data is organized into a tree structure and used to group, classify, organize, and distribute sales transactions data. This ensures that sales reps are accurately compensated, and reporting is also accurate.

Categories and classifiers are used to sort and classify transactions. Classified transactions are allocated as credits to generate compensation, through the use of Territories.

During the classify stage, the Pipeline will compare transaction fields and match them with classification rules.

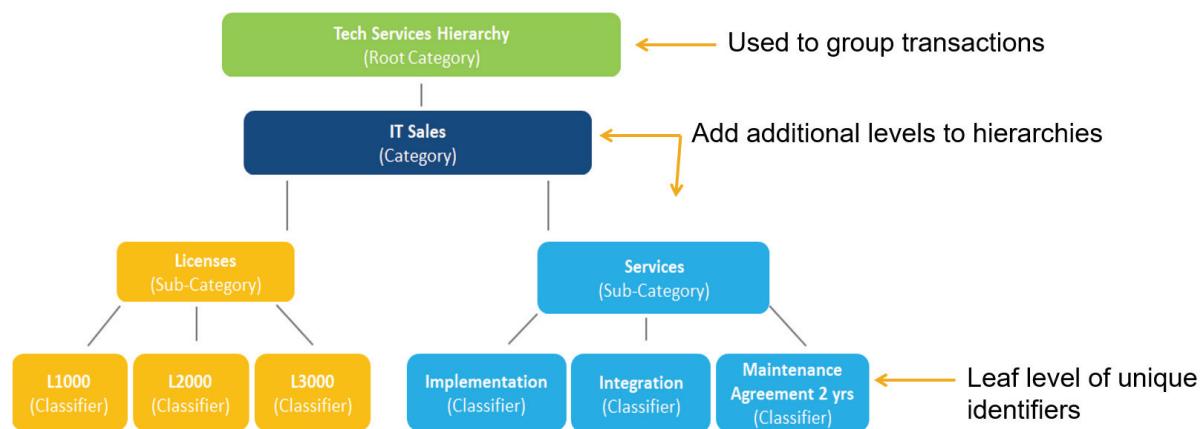
With the use of Territories, transactional data results can be properly allocated during the allocate stage.

 **Notes:**

CATEGORY HIERARCHY

Category Hierarchies have three different sections.

1. **The Root Category:** Used to group transactions in meaningful ways. It defines the category hierarchy. It is the top level or node of the category structure. It contains the classifier type and the classification rule.
2. **Categories and Subcategories:** Provides the ability to add additional levels to hierarchies
3. **Classifiers:** are Leaf-level unique identifiers of a category tree. This is the actual “thing” being classified. The individual product or service sold.



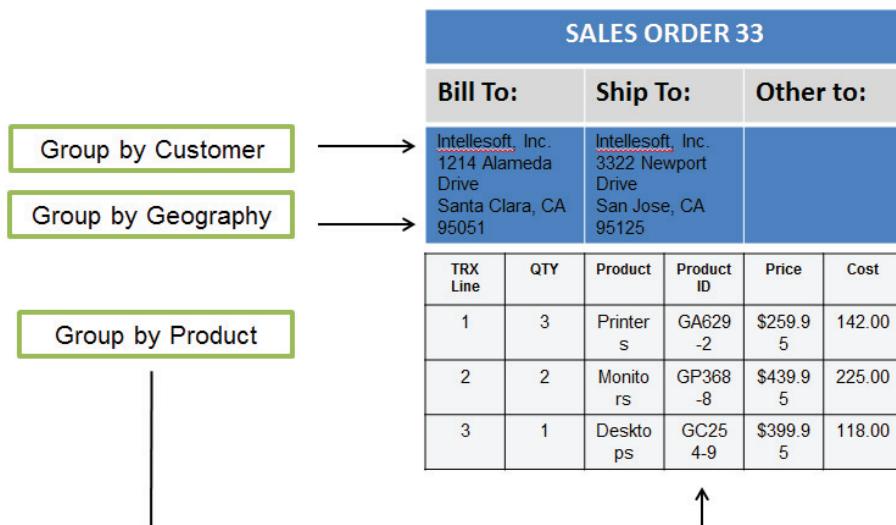
Notes:

CATEGORIES

Categories are used to group sales transactions in meaningful ways. The groupings determine how position assignments receive credits.

Categories are used to filter transaction into groups based on specific fields on each transaction. During pipeline processing, the Classify stage uses Classification rules to classify valid transactions.

Categories are built in a hierarchical structure that can include sub-categories



Notes:

CLASSIFICATION: CATEGORIES AND SUBCATEGORIES

The Root Category defines the Category Hierarchy. It is the top level or node of the Category Structure and contains three important pieces of information.

1. **A Unique Name**
2. **Classifier Type.** This is a short term that describes the type of data being classified in that Category Hierarchy; such as product, customer or channel. Classifier Types: are used to uniquely organize and identify different kinds of category data.
Predefined Classifier Type: postal code – customer – product. Example classifier type: product: dictates that all the unique identifiers or classifiers of this hierarchy will be considered products and stored in the pre-defined product table.
3. **Classification Rule** is an expression used to match the classifier with a field in the Transaction record. It sets the condition that the transaction product ID for example which is located on the transaction must match the category product ID which is located within the classifier. If there is a match, the transaction will be bucketed into the correct category. Once transactions are filtered into meaningful groups, they can be used to allocate credit to the appropriate person.
 - A category's effective date range must be less than or the same as the effective date range of the category hierarchy.
 - A category cannot be effective for a greater range of time than its category hierarchy.
 - The subcategory cannot be effective for a greater range of time than its owning category.

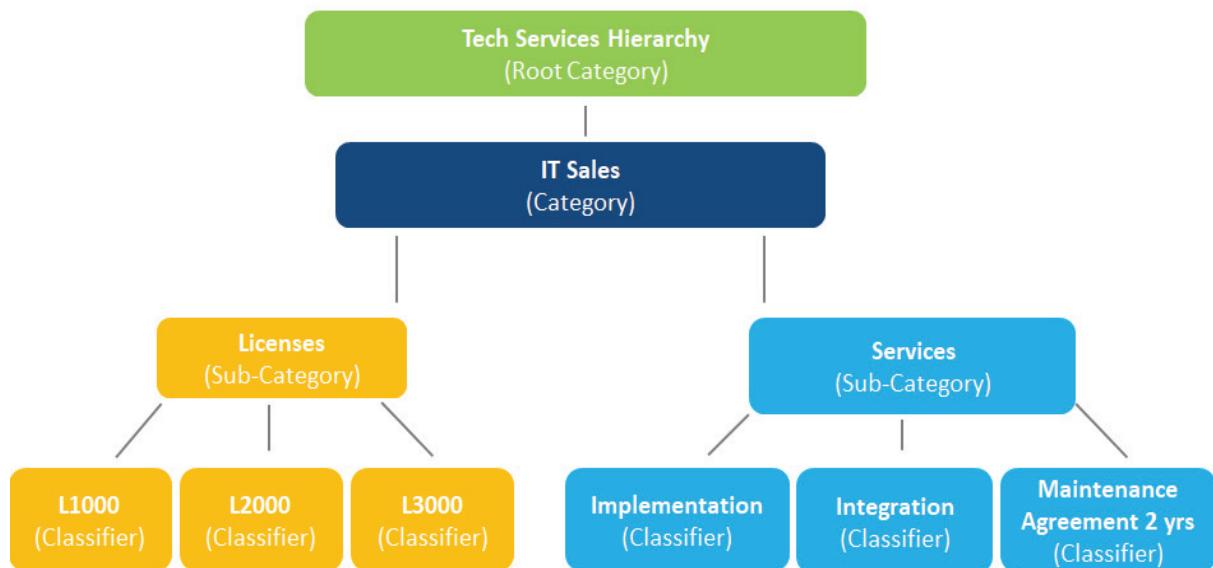
Notes:

CLASSIFICATIONS RULES: CLASSIFIERS

The Classifier is a generic term used to refer to the data used to classify transactions. The Classifier consists of the lowest level of the category hierarchy and represents the actual object that is being categorically organized.

The Classification Rule is the mechanism in which we use a unique identifier, such as a Product ID, to match a Classifier record to a Transaction being processed. Classification rules drive the Classify stage of the Calculation.

Note: if the classification rule does not have an expression, it will not classify the transactions. The classification rule expression is key to classifying the transactions. After a category hierarchy is created with its required classifier type, the classifier type cannot be changed, once a classification rule exists.



CLASSIFICATION RULES

The classification rule is a Boolean expression that matches a field on a classifier record with a field on a transaction. During calculation processing, the expression is processed for each transaction and it is determined whether the transaction has a matching classifier.

Category Hierarchy Details			
Categories > CUSTOMER TREE			
General Information			
Standard Fields			
Name *	Description	Business Unit	Classifier Type *
CUSTOMER TREE	-	-	Customers
Last Modified *	Effective Start Date *	Effective End Date *	
7/17/2018, 4:36 PM	1/1/2017	1/1/200	
Classification Rule			
Return Type:	Expression:		
Boolean	Transaction.Billing.Customer ID = Customer.Customer ID		

Expression:

Transaction.Billing.Customer ID = Customer.Customer ID

Notes:

VALID CLASSIFICATION RULES

The classification tree must be defined by the rule. If it is left blank, the hierarchy will not classify transaction data.

For a classification rule to be valid, you must have, at a minimum;

Transaction.xxx = Classifier.xxx.

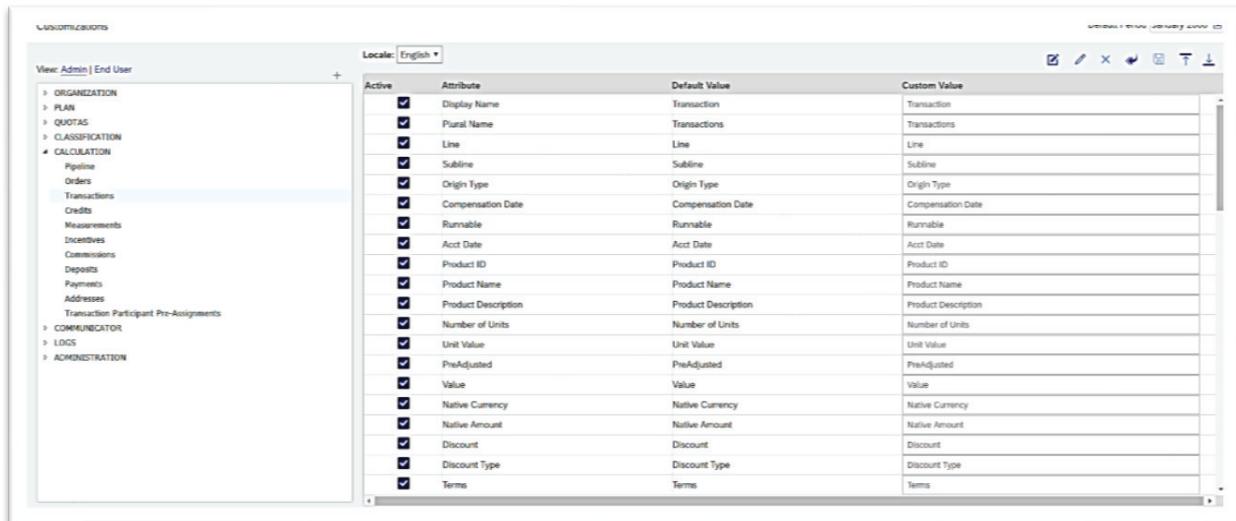
To avoid transactions without classifications, ensure fields, in a classification rule, are not empty or NULL.

 **Notes:**

GENERIC ATTRIBUTES

To use generic attributes in the classification tree, attributes must be created and enabled in the Customization workspace.

Once the generic attributes have been added, they can be used to build the Expression.



The screenshot shows the SAP Fiori Customization workspace. On the left, there is a navigation sidebar with sections like ORGANIZATION, PLAN, QUOTAS, CLASSIFICATION, CALCULATION, COMMUNICATOR, LOGS, and ADMINISTRATION. The CALCULATION section is expanded, showing sub-items like Pipeline, Orders, Transactions, Credits, Measurements, Incentives, Commissions, Deposits, Payments, Addresses, and Transaction Participant Pre-Assignments. The main area displays a table of generic attributes:

Active	Attribute	Default Value	Custom Value
<input checked="" type="checkbox"/>	Display Name	Transaction	Transaction
<input checked="" type="checkbox"/>	Plural Name	Transactions	Transactions
<input checked="" type="checkbox"/>	Line	Line	Line
<input checked="" type="checkbox"/>	Subline	Subline	Subline
<input checked="" type="checkbox"/>	Origin Type	Origin Type	Origin Type
<input checked="" type="checkbox"/>	Compensation Date	Compensation Date	Compensation Date
<input checked="" type="checkbox"/>	Runnable	Runnable	Runnable
<input checked="" type="checkbox"/>	Acct Date	Acct Date	Acct Date
<input checked="" type="checkbox"/>	Product ID	Product ID	Product ID
<input checked="" type="checkbox"/>	Product Name	Product Name	Product Name
<input checked="" type="checkbox"/>	Product Description	Product Description	Product Description
<input checked="" type="checkbox"/>	Number of Units	Number of Units	Number of Units
<input checked="" type="checkbox"/>	Unit Value	Unit Value	Unit Value
<input checked="" type="checkbox"/>	PreAdjusted	PreAdjusted	PreAdjusted
<input checked="" type="checkbox"/>	Value	Value	Value
<input checked="" type="checkbox"/>	Native Currency	Native Currency	Native Currency
<input checked="" type="checkbox"/>	Native Amount	Native Amount	Native Amount
<input checked="" type="checkbox"/>	Discount	Discount	Discount
<input checked="" type="checkbox"/>	Discount Type	Discount Type	Discount Type
<input checked="" type="checkbox"/>	Terms	Terms	Terms

Notes:

CLASSIFICATION RULE EXAMPLE

The image below is a classification rule example. This expression requires two matches.

1. Transaction generic attribute 1 has to = the product id on the product tree.
2. Transaction generic attribute 2 has to = the region on product tree.

(Product.Product ID = Transaction.GA01: Product ID) AND (Products.GA01:Region = Transaction.GA02: Region)

Product Tree								
Product ID	Name	Description	Business Unit	Last Modified	Effective Start Date	Effective End Date	GA01: Region	GN01: Product Rate
9000				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	WEST	1%
9010				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	EAST	5%
9020				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	SOUTH	2%
9030				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	MID	2%

Transaction								
Order	Line	Subline	Event Type	Comp Date	Value	GA01: Product ID	GA02: Region	
TXN_0001	1	1	Revenue	11/1/2018	1000 USD	9000	WEST	

If a transaction passes both checkpoints, Commissions will offer validation and assign the matching classifier.

After a match is established, information associated with the classifier can be used in relation to the transaction.

CATEGORY HIERARCHY DEMONSTRATION

Use the space below to write notes, while the instructor performs the demonstration.

Notes:

TERRITORIES IN RELATION TO CLASSIFICATION DATA

Territories are named groups of categories and classifiers, used to filter the allocation of transactions or credits for credit and measurement rules, based on assigned sales territories. This means they are defined using categories and classifiers.

Note: Not all plans use Territories.

Territories are used when a plan automatically credits a transaction to a specific person, based on a criterion, such as postal codes, geographical, customer, or products.

The classify stage, during pipeline processing, will use classification rules, established in the classification workspace, to group and classify transactional data.

Territories then allocate the classified transactional data and assign them to the correct compensation plan, sales rep, region, customer, etc. It's the part of the process that connects transactional data with compensation plan processing.

 **Notes:**

CLASSIFICATION EXAMPLE

Tammy, who has a participant ID of THOWARD, is assigned to a plan, using the Territory Variable, "TV Software Products." This variable gives the Administrator the flexibility to assign individual territories to each position on a plan.

The screenshot shows two overlapping interface windows. The top window is titled 'Territory Details' and contains fields for Name (T_THOWARD), Business Unit (Any BusinessUnit), Description (Tammy Howard's product territory for 2018), Effective Start Date (1/1/2018), Effective End Date (1/1/2020), and Last Modified (11/6/2018, 11:18 AM). It also shows a 'Territory' section with an expression: 9000:SOFTWARE PRODUCTS. The bottom window is titled 'Position Details' and shows a 'Plan' section with a table containing a single row: Software Account Executive Plan, from 1/1/2018 to 1/1/2020. To the right of the plan table is a 'Variables' section where a variable TVV_Software Products is assigned to the territory T_THOWARD. Two orange arrows point from the text 'Tammy Howard' and 'Territory = 9000' at the top left to the 'Territory' expression field in the Territory Details window.

Tammy should receive credit for product ID 9000. Her Territory should reference the Product Tree with product ID = 9000. Her Territory should reflect this.

Note: The Territory is using information stored in the classifier.

This makes Tammy eligible to receive credit for order TXN_0001.

Note: 9000 is matched as the classifier, not only because of the Product ID, but also because of the associated Region. Likewise, other reps may be responsible for 9010, 9020, etc.

Order	Line	Subine	Event Type	Comp Date	Value	GA01: Product ID	GA02: Region	Classifier Match?
TXN_0001	1	1	Revenue	11/1/2018	1000 USD	9000	WEST	9000

Product ID	Name	Description	Business Unit	Last Modified	Effective Start Date	Effective End Date	GA01: Region	GN01: Product Rate
9000				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	WEST	1%
9010				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	EAST	5%
9020				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	SOUTH	2%
9030				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	MID	2%

When the pipeline is run, she will be allocated TXN_0001 as part of her territory. This will give her a credit.

CLASSIFICATION EXAMPLE IN RELATION TO RATE

Another popular use case uses classification to pull additional values, associated to a transaction.

For example, your transaction may be a direct assignment but may still be classified against if it matches the criteria defined in a classification rule. You can leverage data tied to the matched classifier to add additional required details for accurate commission calculation. This can work regardless of how the transaction is allocated (through filtering condition, territories, direct assignment etc.)

The screenshot displays two tables side-by-side. On the left is the 'Territory Details' table, which includes fields for Name (T_HOWARD), Business Unit (Any BusinessUnit), Description (Tammy Howard's product territory for 2018), Effective Start Date (1/1/2018), and Effective End Date (1/1/2200). On the right is the 'Product Tree' table, which lists four products: 9000, 9010, 9020, and 9030. A yellow arrow points from the 'Name' field in the Territory Details table to the 'Name' column in the Product Tree table for the row where Product ID is 9000. The Product Tree table also includes columns for Description, Business Unit, Last Modified, Effective Start Date, Effective End Date, GA01: Region, and GN01: Product Rate.

Product ID	Name	Description	Business Unit	Last Modified	Effective Start Date	Effective End Date	GA01: Region	GN01: Product Rate
9000				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	WEST	1%
9010				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	EAST	5%
9020				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	SOUTH	2%
9030				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	MID	2%

Notes:

CLASSIFICATION EXAMPLE IN RELATION TO RATE

Because Tammy's credit (which came to her through a territory assignment T THOWARD) is classified against Product ID 9000, we can leverage any of 9000's associated fields for calculation.

$$\text{TXN_0001} = (1000 \text{ USD}) * (1\%) = 10 \text{ USD}$$

GN01: Commission:							
Transaction.Value	Transaction.Classifier(SOFTWARE PRODUCTS).GN01: Product Rate						
Transaction							
Order	Line	Subline	Event Type	Comp Date	Value	GA01: Product ID	GA02: Region
TXN_0001	1	1	Revenue	11/1/2018	1000 USD	9000	WEST

Product Tree								
Product ID	Name	Description	Business Unit	Last Modified	Effective Start Date	Effective End Date	GA01: Region	GN01: Product Rate
9000				11/1/2018, 2:31 PM	1/1/1900	1/1/2200	WEST	1%

Product ID 9000 is paid at a rate of 1%. Any transaction that comes in for this product, it's always a flat payment of 1% on the total value.

The value field on the credit may be:

- Transaction.Value * Transaction.Classifier(Products).GN01: Product Rate
- For TXN_00001, this means 1,000 USD * 1% will equal 10 USD
- The 1,000 is the Transaction Value.
- The 1% is derived by tracing the matched classifier (9000: Products), and pulling the associated GN01: Product Rate field

PUTTING IT ALL TOGETHER

Tammy Howard is expected to receive credit for TXN_0001 and will be paid \$10 USD. We are validating scenario 1 – using territory and scenario 2 using the commission calculation at 1%. One or both may be used in one scenario.

Tammy Howard - Expected Results

- Credit for TXN_0001
- Get Paid 10 USD

Order	Line	Subline	Event Type	Comp Date	Value	GA01: Product ID	GA02: Region	Classifier Match?
TXN_0001	1	1	Revenue	11/1/2018	1000 USD	9000	WEST	9000

Condition	Actual Values	Passed?
(Products.Product ID = Transaction.GA01: Product ID)	9000 = 9000	YES
(Products.GA01: Region = Transaction.GA02: Region)	WEST = WEST	YES

We are looking to stamp the transaction with its associated classifier. There is a chance that no classifier will classify against the transaction that is being analyzed.

TXN_0001 matches to 9000: Products because the criteria successfully matched from the classification rule.

CLASSIFICATIONS BEST PRACTICES

- Always have a classification rule in the category hierarchy
- Always have a default territory
- Reminder! A transaction can be labeled (classified) multiple times, once for each defined Category hierarchy tree.
- Fields matching classifiers must have values. Do not have Null

 **Notes:**

Lesson 4: Classification Data and Compensation Elements

Topic 3: Compensation Elements

COMPENSATION PLAN ELEMENTS

Compensation Plan Elements are reusable objects that are built into compensation rules or other calculations to return a value. Rule Elements make it easier to create and maintain compensation plans.

Access to any of the Rule Elements is available from the Plans menu. Each type of Rule Element has its own workspace.

Advantages of Compensation Elements:

- Compensation elements allow the encapsulation of data in distinct objects rather than storing everything in a large, complex compensation plan.
- Compensation Elements, such as Rate Tables, have special abilities that allow certain tasks to be accomplished, using this type of object.
- Most Compensation Elements are Effective Dated, which makes it easier to manage changes in plans.

Let's review the following Compensation elements:

- Territories
- Fixed Values
- Rate Tables
- Lookup Tables
- Formulas
- Quotas
- Variables

Note: Until a Compensation Element is associated with a Rule, Variable, or Plan, it is not used in calculating compensation. Compensation Elements merely capture data and are associated in a plan for calculations.

 **Notes:**

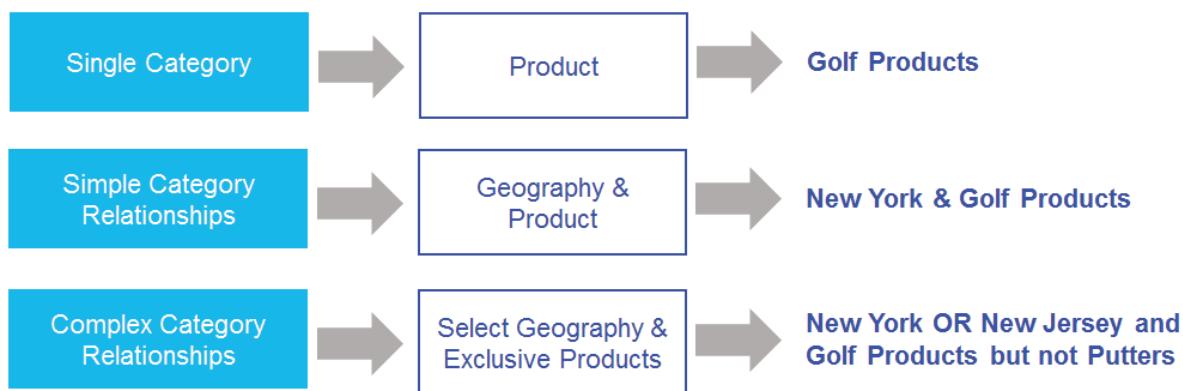
TERRITORIES

Territories filter the allocation of transactions, based on assigned sales territories. Not all plans use Territories. Territories are used when a plan automatically credits a Transaction to a person based on a criterion, such as the location, product or customer type.

Territories:

- Are defined using Categories and Classifiers
- May be simple or complex
- Are flexible – they are NOT constrained to refer to geography
- May be referenced in Credit or Primary Measurement Rules

Territories include:



A Territory is a group of categories and classifiers that is used to filter input to credit and primary measurement rules.

Territories are organized by combining the categories and/or classifiers using “and”, “or” and “not” to identify how categories and classifiers are combined to create them. Parentheses are also provided to allow you to group all components of the territory appropriately.

Notes:

TERRITORY WORKSPACE

In the Territory workspace, you can create new territories, edit existing territories, and delete territories from the Territory tab.

In the territory Expression area, you can define your territories by selecting components from the Legal Moves pane. You can use the logical operator buttons to join or combine territory criteria; you can use 'AND', 'OR', 'NOT', in addition to creating parenthetical statements. SAP Commissions processes the logical operators of 'AND' and 'OR' in the order of operations. The AND takes precedence over the OR.

For example: Golf Putter AND Named Account OR Area Code 831 is processed as
[(Golf Putter AND Named Account) OR Area Code 831]

Note: You can copy and paste territory definitions between territories. To do so, select a territory, double-click the definition, use Ctrl-C to copy it, use Ctrl-V to paste it into the target territory

Notes:

USING MULTIPLE CATEGORIES

If multiple categories are used to create a territory, construct the territory definition to maximize processing efficiency. SAP Commissions evaluates territories from the top down. After the territory evaluation finds a match, it stops evaluating and moves to the next step in the rule.

- With an AND condition, both parts must be true for the territory to succeed. List the clause that is most likely to *fail* first. If it fails, the rule engine stops evaluating and moves on. If you put the clauses in the other order, most likely to succeed, then the rule engine must go on to evaluate the second clause.
- With an OR condition, the match succeeds if either clause is true. List the clause that is most likely to succeed first. If it succeeds, the rule engine stops evaluating sooner and moves to the rest of the rule.

Notes:

CREATE A TERRITORY DEMONSTRATION

Notes:

DELETING A TERRITORY

A territory may be deleted which was created either manually or using XML import. A territory that is referenced by a rule or rule element or is assigned to a territory variable cannot be deleted. Deleting a territory removes all versions of the territory object from SAP Commissions; however, the audit log in the Audit Log workspace retains information on the actions performed on the territory object, including its remove (delete) date, and information about the object itself.

Note: To delete a version of a territory, use Manage Versions.



Notes:

TERRITORIES BEST PRACTICES

- Use Parenthesis and Logical order of operations to make sure the statement is logically processed the way you want it to.
- Keep efficiency in mind.
- For an AND condition, both parts must be true for the territory to succeed. List the clause that is most likely to fail first. If it fails, the rule engine stops evaluating and moves on.
- For an OR condition, the match succeeds if either clause is true. List the clause that is most likely to succeed first.
- Never leave a Territory object Blank, this will cause errors in the Pipeline that will be challenging to interpret.
- If you don't know what to put in a Territory at the time you are creating it, just put in the Boolean FALSE.
- Use with a Variable. Avoid hard coding a Territory into a rule.

Notes:

QUOTAS

Quotas
CAN:

- Be managed from a single screen across an entire reporting structure
- Represent multiple period types
- Perform automatic sum over various periods across the reporting structure
- Useful in setting default values at the variable, title or plan levels

Quotas
CANNOT:

- Be Effective Dated
- Apply to all versions of a Position
- Have default values

 **Notes:**

QUOTA WORKSPACE

The detail pane of the Quotas workspace contains two tabs: The General Information tab and the Quota Values tab.

General Information Tab

The following figure shows the General Information tab.

Quota Details

General Information Quota Values

Standard Fields ▾

Name (Required) RK Quota 0102	Business Unit US	Description	Calendar (Required) Main Monthly Calendar
Unit Type (Required) USD	Last Modified (Required) 1/2/2019, 2:57 PM	Period Types (Required) <input checked="" type="checkbox"/> Month <input type="checkbox"/> Quarter <input type="checkbox"/> Year <input type="checkbox"/> Decade	

Quota Values Tab

The following figure shows the Quota Values tab. To view a portion of the position hierarchy, specify the top node you want to display. You can also view values for a specific period.

Quota Details

General Information Quota Values

Search Period: January 2019

Position / Participant	January 2019
RK Position 0201 (RK First 0102 RK Last 0102)	
si_pos (si test)	\$200.00

Previous

CREATING A QUOTA

To assign quota values to positions, User accounts must have read permissions to positions. If your organization uses Business Units, the quota's Business Unit assignment should match the associated position's assignment.

You cannot copy quotas. If you must duplicate a quota, you can export the quota to XML, edit the XML file, so that the quota uses a new name, and then import the quota XML.

The image below shows the permission levels required to be able to assign quota values to positions in the Roles workspace.

The screenshot shows the SAP Fiori Role Details interface. On the left, there is a sidebar with icons for globe, lock, and gear, followed by a tree view of roles: ADMINISTRATION, ORGANIZATION (which is selected and highlighted in orange), PLAN, Rule Element, Data Type, Classification, Logs, Models, CALCULATION, and Communicator. The main area is titled 'Role Details' and has tabs for 'General Information' and 'Permissions'. The 'Permissions' tab is active, showing a table of permissions for various entities. The table has columns for Read, Workspace, Create, Update, Delete, and Assign. Most entities have the 'Read' and 'Create' checkboxes checked. The 'Participants' row has all checkboxes checked. The 'Positions' row has the 'Read' and 'Create' checkboxes checked. The 'Private Data' row has the 'Read' checkbox checked. The 'Participants Name' row has the 'Read' checkbox checked. The 'Participants Terminate' row has the 'Read' checkbox checked. The 'Titles' row has the 'Read' and 'Create' checkboxes checked. The 'Position Relation' row has the 'Read' and 'Create' checkboxes checked. The 'Roll Types' row has the 'Read' checkbox checked. The 'Position Groups' row has the 'Read' and 'Create' checkboxes checked.

	Read	Workspace	Create	Update	Delete	Assign
Participants	<input type="checkbox"/>					
Positions	<input type="checkbox"/>					
Private Data	<input type="checkbox"/>					
Participants Name						
Participants Terminate						
Titles	<input type="checkbox"/>					
Position Relation	<input type="checkbox"/>					
Roll Types	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Position Groups	<input type="checkbox"/>					

Notes:

DELETING A QUOTA

You can delete a quota that was manually created if does not have results data present. You cannot delete a quota that has related results data. Deleting a quota removes the quota and all its quota values from SAP Commissions. However, the audit log in the Audit Log workspace retains information of the actions performed on the objects, remove (delete) dates, and about the objects themselves.

Take caution when deleting quotas, since they are removed from the database. Quotas are not effective dated, so it is more drastic to delete them (you cannot simply end-date them as you can with objects that are effective dated).

 **Notes:**

QUOTAS BEST PRACTICE

- The relationships between the Quotas is defined only by the Reporting Relationship.
- Quotas are only at the Position level.
- Don't leave a Quota blank/Null that is for a Position on a Plan, or it will create Errors in the Pipeline for the period where it is blank.
- Re-sum subordinate Quotas at the manager level if you ever change the values of the subordinates, as it will not automatically do this.
- Rule of thumb: Use Quotas only if they are differing by position.

 **Notes:**

FORMULAS

Formulas are reusable Compensation Elements that contain mathematical equations. A Formula can be used in a compensation rule, a Rate Table, or a Lookup Table.

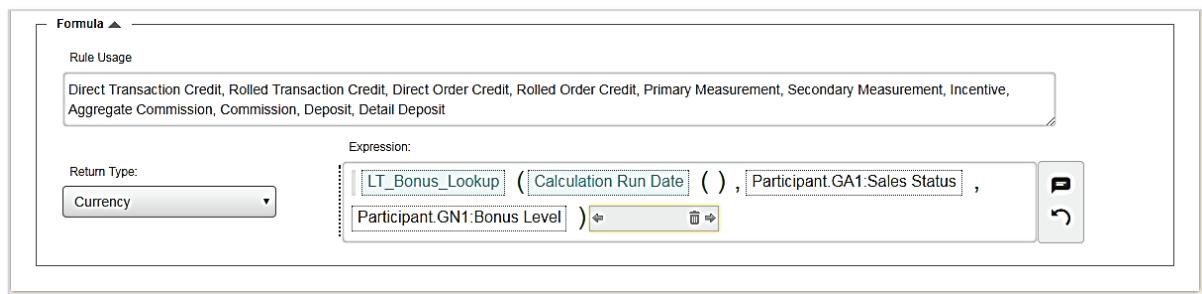
Formulas can reference other Formulas. This means that a complex calculation may be broken into simple blocks, with each Formula responsible for a basic aspect of the calculation. Formulas can have many types of inputs and outputs, including dates, numbers, currency or even text strings.

Formulas can have the following output types:

- Currency
- Boolean
- Date
- Integer
- Percent
- Quantity
- String

Because you can add many types of input to a Formula, the Rule Usage box displays the types of rules in which the Formula can be used, depending on where the data is coming from.

Formulas include pre-set *Functions* that can be used to perform specific tasks. These operate like functions in Microsoft Excel ®: each function requires inputs that are displayed in the Editor and should be populated before the Formula can be saved.



CREATE A BASIC FORMULA DEMONSTRATION

Notes:

DELETING A FORMULA

You can delete a formula that was just manually created in the UI. You cannot delete a formula that is referenced by a rule or a rule element. To delete this formula, change or remove the condition or action that references the formula. Deleting a formula removes all versions of the formula object from the SAP Commissions; however, the audit log in the Audit Log workspace retains information on the actions performed on the formula object, including its remove (delete) date, and information about the objects themselves.

Note: To delete a version of a formula, use Manage Versions on the toolbar.

 **Notes:**

FORMULAS BEST PRACTICES

- Keep formulas readable and straight forward.
- Be cautious when using Functions within Function calls, inside a Formula.
- Don't leave a formula blank.

 **Notes:**

FIXED VALUES

Fixed values store static period-specific numbers associated with a unit type.



Fixed Value Benefits:

- Easier to manage change
- Change the Fixed Values or create a new Effective Version without having to make a change to the compensation plan
- Fixed values can have a Period Type that allow you to preset values for different periods in the same Fixed Value object
- May be referenced from formulas, rules, Rate Tables or Lookup Tables
- Are typically used to store rates, accelerators, multipliers and bonuses
- Are reusable

Fixed Value Example:

You have a seasonal compensation plan for an organization. You want to have the following quotas:

- \$1,000 in Q1
- \$3,000 in Q2
- \$2,000 in Q3
- \$6,000 in Q4

You can create a single Fixed Value and set the period type as *quarter*. This will allow you to enter a separate entry field for each quarter.

WORKING WITH FIXED VALUES

- You cannot change the period type of a Fixed Value after you have entered values. If you want to change the period type of a Fixed Value, you must create a new Fixed Value.
- When values are not entered in consecutive cells for fixed values, gap versions are created. These gap versions are assigned null values.

 **Notes:**

USING A FIXED VALUE OR QUOTA

The matrix below shows the difference between the two and may help you decide when to use each one.

Fixed Values	Quotas
Set quota values for a group of positions unrelated in the reporting hierarchy	To manage quota values for a large portion of the organization from a single screen
Set default values at the variable, title, or plan levels	Quota values can be viewed for an entire position reporting hierarchy across multiple period types

Notes:

FIXED VALUES AND QUOTAS

Fixed values cannot be used in a quota object. In cases where a rule or rule function asks for a quota value, you can specify either a literal value, a fixed value, a fixed value variable, or a quota object.

For example, a commission rule uses a value in a field labeled “quota” to calculate the commission. In this quota field, you can specify a literal value, a fixed value, a fixed value variable, or a quota object.



Notes:

CREATING A FIXED VALUE DEMONSTRATION

Notes:

DELETING A FIXED VALUE

You can delete a fixed value that was just created manually. You cannot delete a fixed value that is referenced by a rule or rule element or is assigned to a fixed value variable.

Deleting a fixed value removes all versions of the fixed value object from SAP Commissions; however, the audit log in the Audit Log workspace retains information on the actions performed on the fixed value object, including its remove (delete) date, and information about the object itself.

Note: To delete a version of a fixed value, use Manage Versions.



FIXED VALUES BEST PRACTICES

- Only use a period specific Fixed Value if you are certain the Client does not allow that value to change mid-period. If they do, it is better to use a non-period specific Fixed Value, and version it when it changes.
 - In period specific Fixed Values, be sure to populate every period of the current fiscal year with a value (Do not leave Null) or it will create errors in the pipeline.
 - Have a process documented to populate all Periods for a new year for all period specific Fixed Values so that they are not Null.
 - Use with a Variable. Avoid hard coding a Fixed value into a rule or plan object.



Notes:

RATE TABLES

A Rate Table is a special-purpose table used to calculate incentive compensation for a commission, where a transaction is paid at different rates, when it crosses rate threshold tiers.

Rate tables can only be used in incentive rules. Incentive Rules can calculate attainment and look up the rate, based on that attainment, in a rate table.

A step commission is a commission structured in such a way that payees are compensated at different rates for different tiers. While this structure is more complex than straight commissions, it is also quite common.

Rate Tables:

- Used to calculate per credit or aggregate credit commissions
- Built with fixed values, formulas, or values from numeric data fields (credit generic numbers, participant generic numbers, positions generic numbers, etc.)
- Referenced in rules variables
- Rate Tables are dependent on the selections in the Incentive rule to make calculations
- The same Rate Table can be used in multiple rules. Whether the Rate Table calculates step or straight commission depends on the rule; the same Rate Table can calculate step commission in one rule and straight commission in another

An Incentive Rule can only calculate step commission using a Rate Table if the input (attainment) and output (commission rate) are a percentage.

If Calculation Result functions are used on a Rate Table, the Rate Table can only calculate a Straight commission Rate, unless complex formulas are used at each tier to force a step calculation.

Attainment	Rate
<=100%	3%
>100%	5%

Option 1: Step Commission

Example: 104%
Quota Attainment

Sales up to 100% pay at base rate
All additional sales pay at high rate

(100 at 3%)
+ (4% at 5%)

Option 2: Straight Commission

Example: 104%
Quota Attainment

Sales are paid at the rate in which
attainment was achieved

(104% at 5%)

CREATE A RATE TABLE DEMONSTRATION

Notes:

DELETING A RATE TABLE

You can delete a rate table that was just created manually. You cannot delete a rate table that is referenced by a rule or rule element or is assigned to a rate table variable. Deleting a rate table removes the rate table object from Commissions. However, the audit log in the Audit Log workspace retains information on the actions performed on the rate table object, including its remove (delete) date, and information about the object itself.

Note: To delete a version of a rate table, use Manage Versions.



RATE TABLES BEST PRACTICES

- Don't leave the rates in a Rate Table blank/Null.
 - Use with a Variable.
 - Avoid hard coding a Rate Table into a rule.

Notes:

LOOKUP TABLES

Lookup Tables are more flexible than Rate Tables.

- They allow organizations to create a table of values based on multiple sets of criteria where the stored values represent the intersection of multiple dimensions.
- They are also known as Multi-Dimension Lookup Tables (or MDLTs) and locate values as a result of the intersection of multiple dimensions or axes.

Let's look at the image below as an example. In this case, the Region, Products, Transaction Totals and Sales Status are the *Dimensions*.

Region	Americas	Americas	EMEA	EMEA	Americas	Americas	EMEA	EMEA
Products	Hardware	Software	Hardware	Software	Hardware	Software	Hardware	Software
Transaction Total	< 10,000	<10,000	<10,000	<10,000	>10,000	>10,000	>10,000	>10,000
Gold	8%	9%	10%	11%	18%	20%	17%	22%
Silver	7%	7%	6%	10%	17%	16%	15%	20%
Bronze	6%	7%	5%	9%	16%	10%	15%	18%

This Lookup Table tells the system the commission rate is 6%, when the Region is EMEA, the Product is Hardware, the Transaction total is less than 10,000 and the Sales Status is Silver. The value returned can be used in the Incentive Rule.

Cell Values can be:

- A reference to a Fixed Value
- A reference to a Formula
- A date listed set of values
- Nothing (a null value)
- A literal value

To use the data stored in a Lookup Table, include a reference to the Lookup Table in a rule, Formula, or rule element. In the reference, you specify the data to pass to the Lookup Table, to determine the cell value to return.

Note: You cannot copy Lookup Tables.

LOOKUP TABLE TIPS

Map out your lookup table beforehand.

1. Decide on the number of dimensions before you enter cell values.
2. Decide which dimensions to view as the top and side dimensions.
3. Complexity can affect size and performance.
4. Consider what parameters you want to pass through the Lookup Table.

 **Notes:**

CREATE A LOOKUP TABLE DEMONSTRATION

Notes:

OPTIONS FOR CELL VALUES IN A LOOKUP TABLE

You can specify a value for a cell in a lookup table by specifying one of the following:

- A literal value (directly type it in)
- A Fixed Value
- A Fixed Value Variable
- A Formula
- An effective dated list of values for a cell
- A Lookup Table
- A Lookup Table Variable
- Nothing (a null value)

Only objects (Fixed Values, Fixed Value Variables, Formulas, and Lookup Tables) associated with the current default calendar can be specified. You can switch value type in a cell by simply replacing the current value.

For example, replace a constant reference with a literal value. Dated list values require a little more work to replace.

Notes:

ENTERING FORMULAS AND EXPRESSIONS IN A LOOKUP TABLE CELL

Either enter a formula or a formulaic expression in a Lookup Table. The result of the formula or expression is the cell's value.

Choose a formula that returns a value with a unit type that matches the Lookup Table's return type. For example, if a Lookup Table's return type is percent, do not include a formula that returns a value in USD.

Do not use a lookup table to directly refer to another lookup table. Instead, create a formula that refers to the lookup table, and then use the formula in the other lookup table.

 **Notes:**

EDITING A LOOKUP TABLE

- Do not edit the structure of a Lookup Table that is assigned as the default of a Lookup Table Variable.
- Do not change the Lookup Table's calendar.
- You can either edit the effective dates of the entire Lookup Table or you can edit the effective versions of the dimension indexes.
- If you have a Lookup Table that is no longer effective, change the effective end date of the Lookup Table to an appropriate date.

 **Notes:**

DELETING A LOOKUP TABLE

You can delete a lookup table that was just created manually. You cannot delete a Lookup Table that is referenced by a rule or rule element or is assigned to a Lookup Table Variable.

Deleting a Lookup Table removes the Lookup Table object from the Commissions. However, the audit log in the Audit Log workspace retains information on the actions performed on the Lookup Table object, including its remove (delete) date, and information about the object itself.



Notes:

LOOKUP TABLES VS RATE TABLES

If the result is a commission rate, then why not just use a Rate Table? The matrix below shows the difference between the two and may help you decide when to use each one.

Rate Table	Lookup Table
Easy to set up	Complex initial setup
Handles step commission	Does not handle step commission
Only calculates commission rates based on attainment or a calculated result.	Can calculate any numeric value based on any input of any data type including strings and categories
Can only be used in Incentive Rules	Can be used in any rule or formula
Can be effective dated	The entire Lookup Table has only one effective period, it cannot be versioned. But each individual cell in the matrix can be effective dated.

 **Notes:**

LOOKUP TABLES BEST PRACTICES

- If you leave values Null, check the box that makes all Null values zero or use conditioning to ensure a rule does not attempt to calculate using a Null.
 - Avoid many nested Lookup Table references. Keep it as simple as possible.
 - Use with a Variable.
 - Avoid hard coding a Lookup Table into a rule or plan object.



Notes:

VARIABLES

Variables are placeholders used in a rule to indicate a Territory, Fixed Value, Rate Table or Lookup Table. Without variables, you would have to create a separate rule whenever a Participant uses a different value than another.

Variable Name	Variable Type	Period Type	Value
TV_Sales_Territory	Territory	N/A	T_Services
FVV_SalesRep_Quotas	Fixed Value	Quarter	FV_Sales_Services_Quota_Q

Use the following steps to include Variables in your plans:

1. Start by creating or importing Compensation Elements to hold data such as Fixed Values
2. Create a Variable for each type of Compensation Element
3. Add the Variable in place of the Compensation Element in the Rules
4. Assign the Variable to a Compensation Element on the Plan, Title or Position level in the Compensation Plan details

Note: Assignments made at lower levels supersede assignments at higher level.

 **Notes:**

USING VARIABLES IN COMPENSATION PLANS

Listed below are tips to using Variables in compensation plan development:

1. Start by creating or importing compensation elements to hold data such as fixed values.
2. Create a variable for each type of compensation element
3. Add the variable in place of the compensation element in the rules
4. Assign the variable to the compensation element on a Plan, Title, or Position level within the compensation plan details.

A few things to know about Variables:

- Variables can only be associated with the same type of Compensation Element
- Once a Variable has been created, the type of Variable can't be changed
- Variable settings such as effective dates, business units, and unit types must be the same as their associated Compensation Elements

 **Notes:**

CREATE VARIABLES DEMONSTRATION

Use the space below to write lab notes.



DELETING A VARIABLE

- You can delete a variable that was just created manually in UI.
- You can also select variables of different types (fixed value variables, rate table variables, lookup table variables, and territory variables) and delete them if all the variables selected are not referred to by other objects.

Deleting a variable removes all versions of the variable object from the SAP Commissions; however, the audit log in the Audit Log workspace retains information on the actions performed on the variable object, including its remove (delete) date, and information about the object itself.

Note: To delete a version of a variable, Manage Versions.

 **Notes:**

VARIABLES BEST PRACTICES

- ALWAYS set a default to any of the Variable types.
 - Have the default produce a zero result, so you will quickly realize when a Variable assignment was missed.
 - Use variables whenever using a plan object that can be set to a Variable instead of hardcoding the plan object in a rule.



Notes:

LESSON 4 REVIEW

In this lesson we reviewed the following objectives:

- Defined Transactions and Orders
- Reviewed Classification Data
- Demonstrated how to create a Classification Hierarchy
- Defined each Compensation Element

Notes:

Lesson 5: Compensation Plans and Rules

LESSON 5: COMPENSATION PLANS AND RULES

Lesson 5 Objectives

- Describe the Compensation Plan management process
- Create and assign a Compensation Plan
- Understand and manage the different types of Compensation Rules
- Discuss rolling Credits vs. rolling other results data
- Explain adjusting Credits
- Describe when and how to hold deposits or credits
- Discuss duplicate Credits
- Discuss Credit Rule output names and Credit Types

COMPENSATION PLAN OVERVIEW

A compensation plan is a set of rules that specifies how to compensate the participant. The compensation plan contains many different components and elements.



A compensation plan determines how transactions and orders are calculated and eventually paid out to the participant.

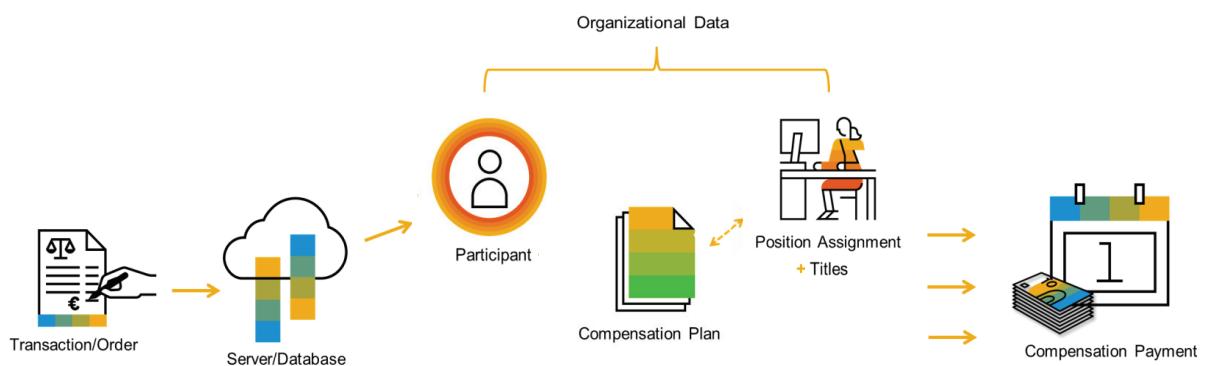
Multiple compensation plans: An organization can have multiple compensation plans to pay titles differently. For example, your organization may have a compensation structure for a Sales Rep and Regional Director.

Notes:

COMPENSATION PLAN OVERVIEW

Let's review a Compensation Plan within the overall compensation process context. A compensation plan will refer to the Position Assignment during the compensation process.

In the diagram below, the compensation plan will continuously refer to the position first, then the participant (whether that's a person or company). Then the participant data will provide the compensation process with details such as hire date, salary, position data, etc.



With this, you can design effective rules that point to the Position Assignment to pull in data needed to calculate compensation.

Notes:

BEST PRACTICES FOR COMPENSATION PLANS

Steps to complete before creating the compensation plan:

1. Identify the needed outcomes (payments, reporting, dashboards) of the plan
 - Work backwards from Incentive to credit to identify these needs
 - Recognize what values, conditions and formulas are needed
 - Use the Deposit Rules as a final check for Payment

2. Create a plan and assign appropriate Titles to Plan
 - Will link all Position Assignments under the Title to plan
 - More efficient processing and easier to manage
 - Build rules from Credit to Deposit based on identified needs
 - Assign Rule Elements to Variables at the appropriate level (Plan, Title or Position) using the Variable Assignments tab in the Plan Wizards workspace.

Note: There should always be a default when developing a variable. The position assignment is the top level and will override any other of the lower assignment. Then comes title and then comes plan and then comes the default. In other words, the default will never override what you may have set at the other levels.

Deleting or editing a plan: It is not recommended to delete a plan unless the given plan has not been used. It's recommended to version a plan and then make changes to the new version of the plan. Versioning creates a record of the evolution of the compensation plan.

Plan design best practices: There are different ways you can create a compensation plan. It's key to use components and to have zero errors in the pipeline. If there are errors, it's imperative to fix the errors to ensure you have an accurate compensation plan (even if it's divide by zero, it still needs to be fixed). Also, it's important to test your plan prior to going live. For additional sample questions to ask before you start developing a plan, check out the last page of this lesson.

CREATE AND ASSIGN A COMPENSATION PLAN DEMONSTRATION

Notes:

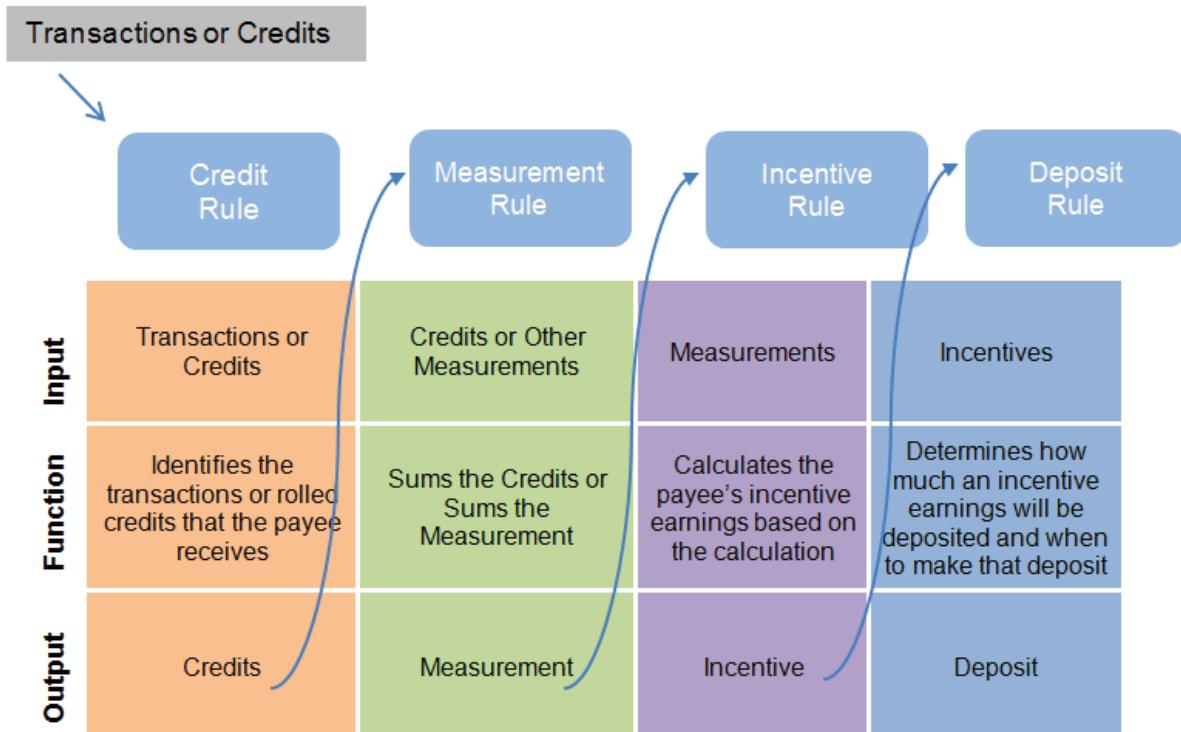
COMPENSATION PLAN RULES

A Compensation Rule is a combination of inputs, condition criteria, function(s), and an output result. There are four rule types that may be used in a compensation plan:

1. Credit
2. Measurement
3. Incentive
4. Deposit

Each rule has an input, function(s), and an output or **Action**. Rules allow for multiple actions. The output of a rule is used as the input of another rule. Each rule has the capacity for conditions, filters, formulas, etc. Rules can be created independently of a plan, through the Rules workspace or from the Plans workspace, which automatically attaches the rule to the plan.

As a consultant, a best practice is to build, using the Rules Workspace and then assign rules to Components. This organizes metric calculations together to allow you to assign specific components to the Plan.



CREDIT RULES OVERVIEW: WHO GETS THE CREDIT?

Commissions uses Credit Rules to analyze transactions, orders, or rollable credits to determine which Position Assignments should receive credits for a sale. Commissions allocates credits, based on one or more transactions and will refine credit results by category, Territory or other conditions, as needed.

There are two types of Credit Rules.

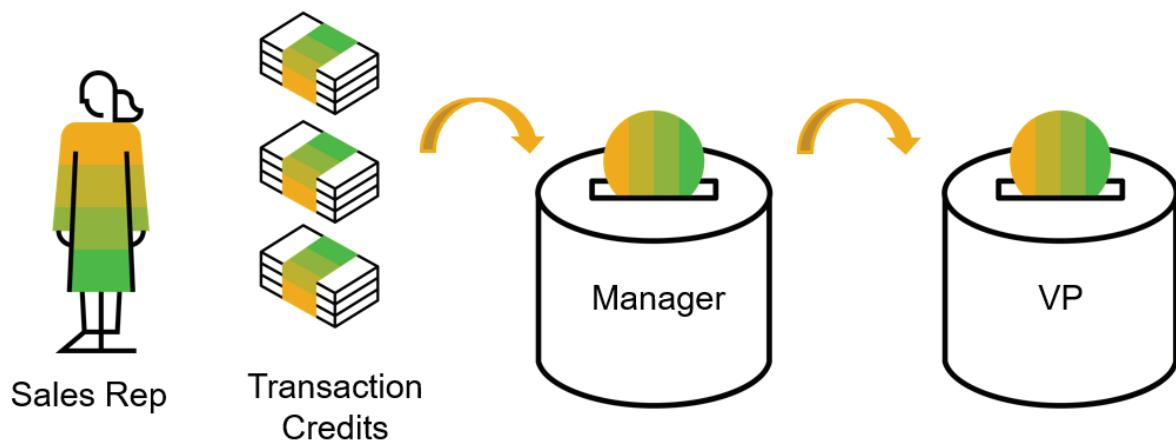
- The **Direct Credit Rule** - generates a credit based on a transaction or order.
- The **Indirect Credit Rule** - generates a credit based on a transaction or order that rolls from another position according to a specified roll type.

Notes:

ROLLING CREDITS VS. ROLLING OTHER RESULTS

If you make a credit rollable, ("allow rollable") the credit becomes able to roll in the direction you define in the indirect credit rule and will roll for as far as permissible up the reporting hierarchy or roll type hierarchy, you defined.

For example: A credit will roll from the Sales Rep, to the Manager to the VP, etc. if they are on a plan with the indirect credit rule and it states to roll the credit based on the reporting relationship.



The reporting Manager and VP benefit from the Sales Rep's performance. This is a basic rolling credits example.

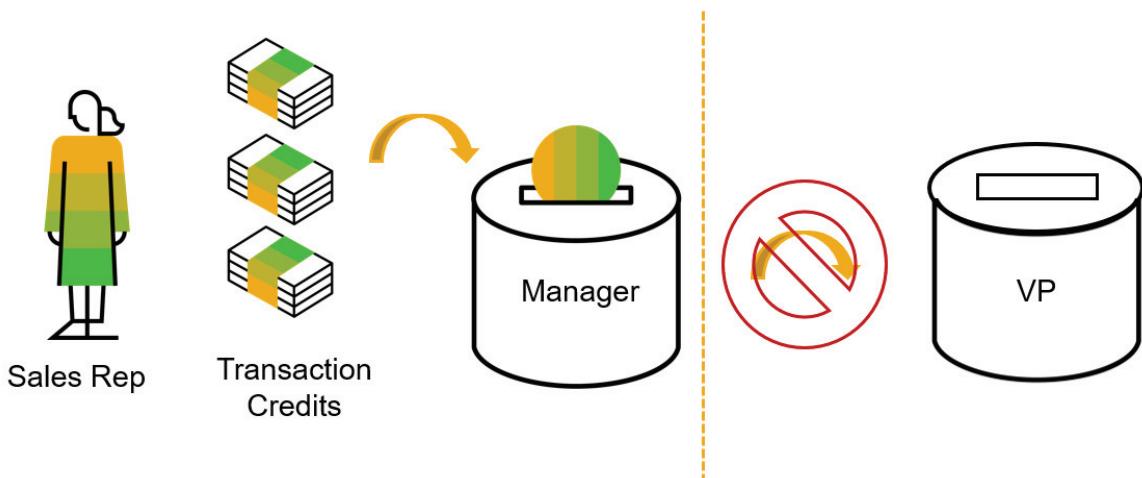
Since credits will roll in the direction you define as far as it can, be very cautious when enabling Indirect credits to be rollable. Otherwise, you can have credits rolling from every tier of the hierarchy and perhaps not be the credits you wanted to roll to a particular Title.

Best Practice is to NOT make Indirect credits rollable, only direct credits.

Notes:

ROLLING CREDITS VS. ROLLING OTHER RESULTS (continued)

Rolling Measurements or Incentives is different from rolling credits. The results from rolling a measurement or an incentive will only roll one level, in the direction that you have defined.



Rolling “Other” Results Example:

A Sales Rep makes a sale, a credit is calculated for the sales rep. Let's say I tell the system to roll a measurement (which again is an aggregate of the credits), to the Manager. It'll roll from the sales rep to the Manager and then it will stop.

The only way to have the measurement value roll further, is to create a Director's rule, that references the output of the Manager's rule and then the measurement will roll up one level again.

Rolling measurements or incentive values means you'll have to roll the value up one tier at a time.

To implement rolling measurement results, state “from another source” when creating the measurement or incentive rule. Next, select the roll type “path” (where will the results roll to).

Note: Rolling measurement and incentive results can slow down the pipeline processing time. The reason for this is because rolling measurements and incentives is dependent on the aggregation of the credits and that all positions contributing to that rolled result are processed before they can be rolled. Because all dependent Positions must be processed together, this can create processing islands. If there is too much interdependency, a single large island can be created, and this dramatically increases the memory needed and length of the processing of the pipeline. A best practice is to roll at the credit level if possible.

DUPLICATE CREDITS

A duplicate credit is a credit generated from the same transaction for a given **position**, **period**, and **credit type**. Those three data points are key!

The output name of a rule is used to differentiate various compensation plan rules' results. Each output name must be unique, unless the conditions of the rules with the same output are mutually exclusive. A common best practice is to always have a different output name for your plan rules. If the same names are used, ensure the rules will never run in the same period for the same position, i.e. mutually exclusive conditions.

Regarding Credit rules, they should never share the same output because this is not used in considering duplicates. The output name of a credit rule doesn't prevent two credit rules from producing the same results, because the key piece of a credit rule is the **Credit Type**. If two credit rules have the same Credit Type, this is where it becomes critical to have mutually exclusive conditions, it does not matter the output name.

Ensure the Credit Type is labeled differently, if it's a credit rule for the same position and period or that the credit rules, with the same credit type, have mutually exclusive conditions.

Note: There are certain designs where you may want to allow duplicates. If so, change the default setting to allow duplicates from False to True. This should be enabled with extreme caution, as it will allow duplicates for the cases you intended, but also allow duplicates, where not intended.

Notes:

ADJUSTING CREDIT VALUES

A manual adjustment will lock credit values, no matter what the administrator does to the incoming data.

If a credit is manually adjusted, the system will remember that forever. To change this, a credit reset is needed. The administrator must perform this reset function. The credit rule will calculate as the original rule was designated. In the case of a re-adjustment, it will produce the new adjusted amount, regardless of the incoming transactions.

As a best practice, complete adjustments only at the transactions. Ensure that adjusted credits are identified as such, so they can be excluded from the expected results of the credit rule calculations.



CREATE A DIRECT CREDIT RULE DEMONSTRATION

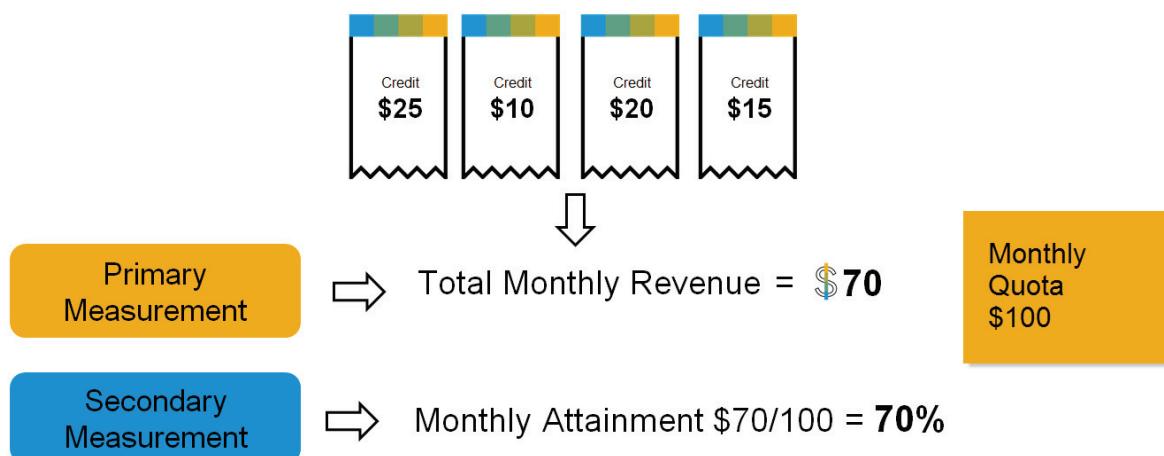
Notes:

MEASUREMENT RULES: WHAT IS MEASURED?

Measurement Rules aggregate a Position Assignment's credits or other results/calculations. As with Credit Rules, there are two types of Measurement rules.

Primary Measurements are aggregates of credits. In other words, it's taking the output of a credit rule to aggregate. Primary Measurement rules are always required in a plan.

Secondary Measurements are aggregates of Primary Measurements or calculations based on Formulas. It uses Primary Measurements or other metrics as its source. Secondary Measurements can be used to sum two Primary Measurements that may have totaled credits by different product lines, thus providing a total measurement value for both product lines. Secondary Measurements are commonly used to produce a calculated result like attainment that can easily be pulled into dashboards or report fields.



PRORATION LOGIC

Proration is used to calculate a proportionate amount of a compensation payment. For example, a company pays an annual bonus to all sales employees. For an employee to receive this bonus, the employee must be with the company for a minimum of three months. The bonus is prorated to align with the number of months the employee has been with the company.

Annual Bonus	\$ Amount	Eligibility Rule	Partial Periods?
Jan – December 2019	\$5,000	Must be with the company for 90 days (3 months)	Include partial periods

New Employee	Start Date	Expected Bonus Payment on final December paycheck
Joan Smith	June 14 th 2019	\$2,916.67 (because we said yes to partial periods, this employee gets credit for the entire month of June)
Matt Sales	November 12 th 2019	Not eligible because of the start date. Employee has not been employed for 90 days.

How to implement proration logic:

Use date functions, typically in a secondary measurement rule, to program Commissions to calculate a prorated compensation payment.

Most commonly used function for proration is the “**Measure Period Overlap**.”

Function Input and Output:

Input:

- Start Date and End Date—Dates for time span #1. The (First) Start Date must be earlier than Second Start Date, and (First) End Date must be earlier than Second End Date.
- Second Start Date and Second End Date—Dates for time span #2
- Period Type
- Note a yes or no (True/False) to detail whether to include Partial Periods

Output: A quantity, measured in the specified period type (Integer return type)

CREATE A PRIMARY MEASUREMENT RULE DEMONSTRATION

Use the space below to write lab notes.



INCENTIVE RULES: HOW MUCH IS CREDITED?

Incentive Rules calculate incentive earnings, based on achievement or other company defined objectives. Typically, when Commissions processes an Incentive Rule, it compares Measurements to attainment targets, such as Quotas for each Position Assignment.

Incentive Rules tend to be most complex because they contain most of the business logic. As a result, there are many ways to configure these rules. Let's start by going over the basic types of Incentive Rules.

Aggregate Incentive Rule

A **Basic or Aggregate Incentive Rule** is used to calculate commissions using either a fixed or sliding rate. This type of rule uses the Measurement as the input and generates the commission amount based on the Measurement, using a Rate Table, Fixed Value, Lookup Table or Formula.

Bonus Incentive Rule

The **Bonus Incentive Rule** is ideal for calculating a bonus or other incentive that is not a commission. We generally define a Bonus incentive rule as one that doesn't calculate the amount of the incentive based on the Measurement.

Per-Credit Incentive Rule

A **Per-Credit Commission Incentive Rule** Per-Credit evaluate the value of each Credit against a Rate Table or a flat rate to produce individual Commission amounts for each credit. The rule then aggregates these amounts to yield total Commissions in the form of an Incentive.

PER CREDIT VS. AGGREGATE INCENTIVE RULES

Aggregate Incentive Rules calculate Incentives directly from the Measurement, without calculating commission amounts for each credit. If the amount of commission paid out for each individual credit is required, the Incentive Rule should be changed to a Per-Credit Incentive Rule.

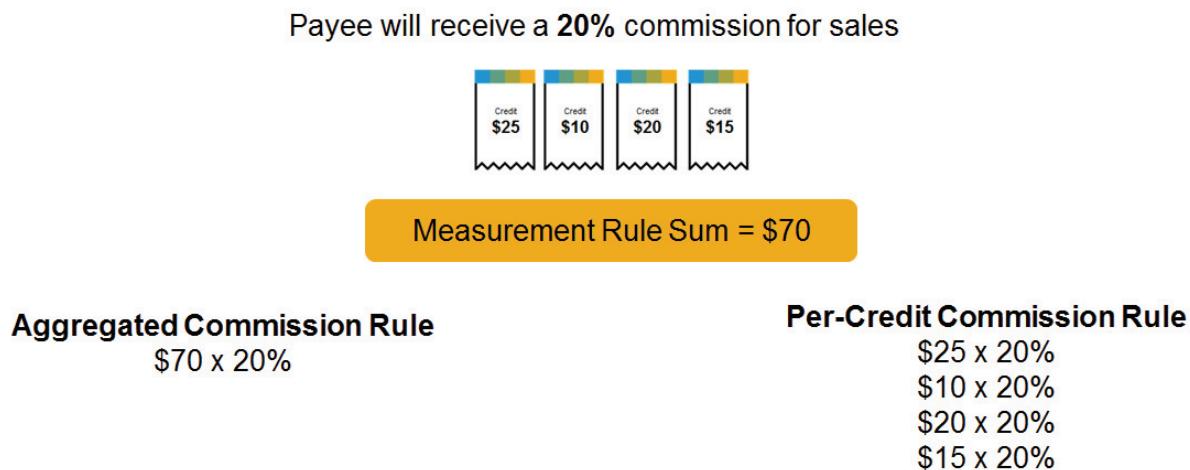
Per-Credit Commission Rules measures the value of each credit against a rate table or a flat rate to produce individual commission amounts for each credit.

Basically, the per credit commission rule allows you to apply/pay different rates to specific (eligible) transactions (credits) within a given period. The rule then aggregates these amounts to yield total Commissions in the form of an Incentive.

Per-Credit Rules require more processing time but will provide the results detail of commissions calculated for each credit. This type of rule doesn't produce different results than a basic incentive rule. A limitation of the per credit commission rule is that it can only be tied to a primary measurement rule. It will not work with secondary measurement rules.

Organizations may choose to use per-credit commissions for reporting purposes when rates for each product are different. Secondly, they may choose to use it, if there are special commissions for single credits over a specified amount.

The diagram below shows an example of the difference between an aggregate and a per-credit Commission Incentive Rule.



INTERPOLATE FUNCTION IN THE INCENTIVE RULE

The interpolate function works within the Incentive Rule in association, using a straight rate table. It provides an incremental value, between multiple threshold tiers, in a straight rate table.

Example: If Joan Smith achieved 100% of her sales quota for the Month of June, then she would receive 10% bonus. Interpolate calculates the incremental value within the threshold tiers.

If Joan Smith achieved 105% of her sales quota for the month of June, then technically, if the interpolate box is checked within the straight rate table box then she would receive a slightly higher commissions rate about 5%. She is halfway through the tier, so she would receive approximately half of the rate for that tier which is half of 10% or 5%.

Commissions Rate	Percentage
No bonus	Below 99%
10% Bonus	100%-110%
15% Bonus	111%-115%
20% Bonus	116% - 120%

To incorporate this action, use the predefined Interpolate Results function in the rule that calculates the straight rate table.

Note: If you decide to use the interpolate function, it's recommended to test the incentive rule several times prior to going live with the rule. Traditionally, it's a very specific function that sometimes takes several attempts to manage it correctly.

Notes:

CREATE A BASIC INCENTIVE RULE DEMONSTRATION

Use the space below to write lab notes.



CREATE AN INCENTIVE RULE – PAYS A QUARTERLY BONUS DEMONSTRATION

Use the space below to write lab notes.



DEPOSIT RULES: WHEN DOES THE PAYMENT OCCUR?

Once we've calculated the amount of a payee's earnings in the Incentive Rules, we need to determine how much of the earning to pay and when to pay it. This is where the Deposit Rule comes in.

A deposit is created only if the incentive is available for deposit. For example, a calculation run in February does not generate a deposit output for a quarterly incentive rule.

There are two types of Deposit Rules:

- *Basic* Deposit Rules - use Incentives as their input; most common
- *Detail* Deposit Rules - use Credits as their input

Some things you can do in a Deposit Rule:

- Put a hold on all or part of a Deposit until a future period
- Differentiate or combine multiple incentives into a single deposit
- Assign Earning Groups and Earning Codes to a Deposit

Notes:

HOLD FUNCTIONS IN DEPOSIT RULES

Hold functions in the deposit rules are used to delay a compensation payment for the payee. There may be times where the company needs to wait for a finalized sale in order to pay the appropriate compensation to the payee.

In some situations, it's better to have delayed processing. This way, the administrator can process the pipeline at the appropriate delay. Example: If there is a 30-day lag for sales to be officially finalized, processing the January month would begin at the start of March so there is no need to hold the deposits, as you are paying at a 30-day lag.

Indefinite hold on Deposit must be manually released in the UI, unless stage hook customization is used to release, per defined requirements.

Other holds on deposit can be defined for defined periods. Keep in mind, that deposits will show in the periods they were created, but have the ever held as true, with a release date, defining when it was released to be incorporated in payments.

However, if holding payments is desired, it's best to hold a deposit, rather than holding credits.

Hold Types:

- Indefinite Hold: This will hold the deposit indefinitely, until an Administrator manually releases the hold.
- Hold with Conditions: It's held until a condition is true. An example would be employee status. Maybe the employee can receive their bonus once they have reached 90 days of employment. You can use reason codes to provide a reason for this hold.
- Release Immediately: This is the normal/standard setting.
- Period Type: You can release it a certain select number of periods, and you can choose the period type within the rule. Could be a quarter, two quarters, etc.

EARNING GROUPS AND EARNING CODES

Earning Codes and Earning Groups are required fields within a deposit rule.

Earning Codes are used to define different types of deposits and for accounting purposes.

Earning Groups are used to group similar types of deposits. Payments of the same earning group will aggregate or offset each other.

Note: It is very important that Earning Codes and Earning Groups not be changed in the Deposit rule, once it's created. It will not affect the calculations, however, it will affect the traceability of that deposit rules' calculations.

Notes:

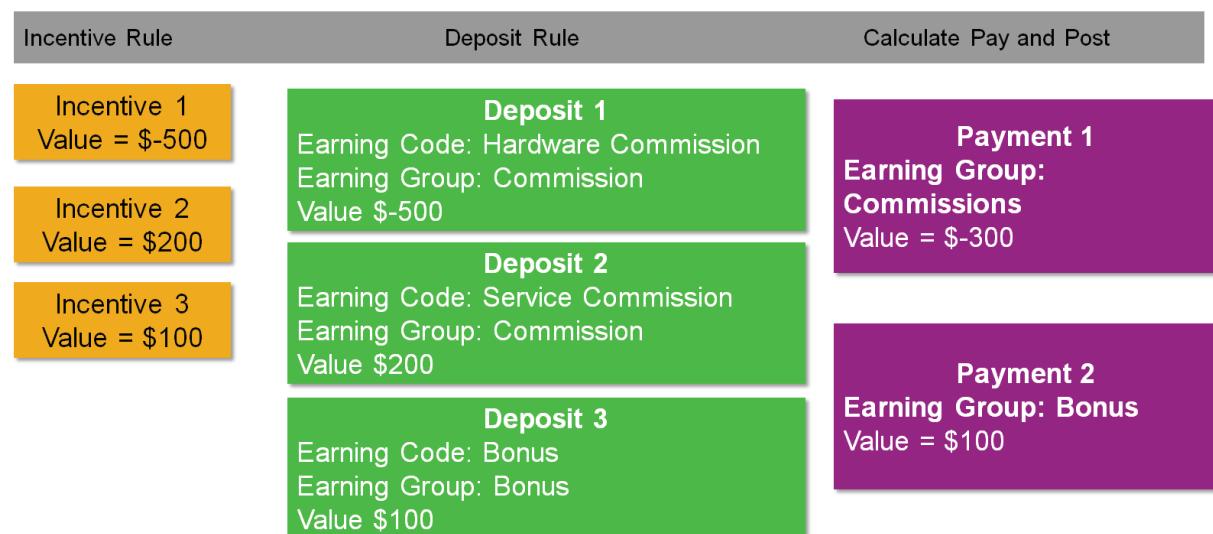
EARNING GROUPS AND EARNING CODES

Earning Groups

In the example below, Incentive 1 and Incentive 2 have the same Earning Group (Commission). The two are combined in a single Payment (Payment 1) with an Earning Group of Commission. The two values (-\$500 and \$200) are combined into a value of - \$300. Deposit 3 has a separate Earning Group (Bonus). The resulting Payment is separate from Payment 1 and pays a value of \$100.

Earning Codes

In the example below, Deposit 1 and Deposit 2 have the same Earning Group, but different Earning Codes. Notice that Payment 1 still combines these into a single Payment.



Note: Earning Codes and Earning Groups will be further discussed in the pipelines lesson.

Notes:

CREATE A DEPOSIT RULES DEMONSTRATION

Use the space below to write lab notes.



ASSIGNING VARIABLES

Variables can be used as placeholders in compensation plans.

Assigning the Variables to their respective Territories and Fixed Values provides the rule with the information it needs to assign actual values for each Position Assignment.

If the plan assigned to the Title includes rules with one or more Variables, those Variables are displayed in the Variables Assignment area.

Rule	Variable
DCR_Sales_Territory	TV_SalesTerritory
IR_Monthly_Sales_Commission	FVV_SalesRepQuota:quarter

Sales Rep – Licenses	Sales Rep - Services
T_East_Products	T_West_Products
FV_Sales_Rep_Licenses_Quota_Q	FV_Sales_Rep_Services_Quota_Q

Best practice: Always assign a default to any variable created to prevent Null pointer errors, when the pipeline runs. Typically, a default that either is the value that applies to most of the Positions or Titles, using that variable, **or** a value that will make the calculation be \$0 dollars. This will bring to the attention of an Administrator that a variable has not been assigned a current value.

Notes:

ASSIGNING VARIABLES DEMONSTRATION

Use the space below to write lab notes.



REQUIREMENTS ANALYSIS CHECKLIST

This is a sample tool/worksheet to analyze the requirements for building the initial compensation plan. This provides an overview of the requirements that need to be discussed prior to developing a plan.

Rules	Possible Considerations	Notes
Incentive	How often should the earning be calculated?	
	What type of earning is being calculated? Is there any condition that needs to be met?	
	Are there any specific needs for reporting?	
Measurement	What products are being considered?	
	What performance metric needs to be aggregated? Revenue? Quantity Sold? Other?	
Credit	Are transactions pre-assigned to the sales rep?	
	Are filters and conditions needed to assign credits?	
	Are the credits coming directly from the transactions?	
	Are the credits coming from another sales rep's credits?	
Deposit	Is the deposit for payment based on any eligibility condition?	
	Is the deposit released immediately for payment?	
	What are payroll and accounting needs?	

COMPENSATION PLAN ANALYSIS QUESTIONS

Listed below are a few sample questions to ask prior to developing a compensation plan.

- How will the teams/groups be setup?
- Are credits going to roll within the organization?
- Are the Rolling Relationships and Roll Types setup?
- Will you be using Business Units?
- Which teams/groups will be getting credit for the sale/order?
- How many plans will you need?
- Have the Participants been assigned to the Position?
- Have the Position Assignments been assigned to a Plan?

Sample Checklist: These are items that are important to understand and discuss with the client prior and during the comp plan development process. Ensure you have the necessary information to develop a successful plan.

- Organizational data
- Relationships (if applicable)
- Participants assigned to Positions
- Position Assignments grouped by Title
- Create Plan and link to a Title
- Ensure Categories, Sub-Categories and Classifiers have been created/Imported
- Rule Elements
- Variables (if applicable)
- Compensation Plan Rules
- AssignVariables to Rule Elements (if applicable)
- Test Plan by running Calculation Process

LESSON 5 REVIEW

In this lesson we reviewed the following objectives:

- Described the Compensation Plan management process
- Created and assigned a Compensation Plan
- Reviewed the different types of Compensation Rules
- Discussed rolling Credits vs. rolling other results data
- Explained adjusting Credits
- Described when and how to hold deposits or credits
- Discussed duplicate Credits
- Discussed Credit Rule output names and Credit Types

 **Notes:**

Lesson 6: Pipelines

LESSON 6: PIPELINES

Lesson 6 Objectives

- Discuss the Pipeline Calculation Process
- Review Results Data
- Discuss Payments and Balances
- Define Manual Orders, Transactions, Credits and Deposits

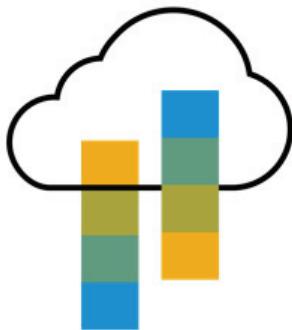
PIPELINE CALCULATION PROCESS

Incentive compensation management requires a workflow that allocates credits for sales, calculates earnings, and pays participants, based on those credits. However, this process is often difficult because of volume, compensation and reporting requirements, time constraints, and data management. This creates challenges when designing and administering an incentive compensation program.

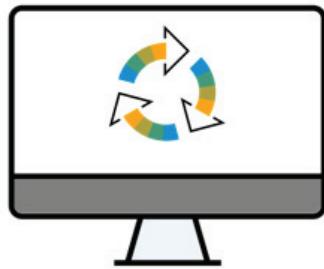
Notes:

WHAT IS A PIPELINE?

Pipelines perform processing tasks to import data, process compensation, and create payments. SAP Commissions' computation pipeline enables compensation professionals to complete the following:



Import Data



Process Compensation



Create Payments

Pipelines process orders, transactions, and reference data to calculate compensation.

The result of pipeline processing is a payment amount for each position assignment, for the specified period. Payments are exported to a payroll system.

Notes:

PIPELINE PROCESS MODEL

The SAP Commissions pipeline consists of consecutive process steps, each building on results from the previous step. Steps are conceptual processes, not running independently, but as a sequence of stages. Stages run one or more steps, plus background, and data reset operations.

The diagram below illustrates the six major stages of a pipeline run.

	Stages	Phases
Compensate and Pay Sequence	Classify	Classify Transactions
	Allocate	Allocate direct credit, indirect credit & primary measurements
	Reward	Reward secondary measurements, incentives & deposits
	Pay	Calculate trial payments & balances
Additional Calculation Stages**	Post	Post payments and balances
	Finalize	Mark the period as final

Note: Designate Post and Finalize if running these stages.

Sequence: <ul style="list-style-type: none">▪ A group of stages that can be run together for more efficient operations▪ Includes the classify, allocate, reward and pay stages
Stages: <ul style="list-style-type: none">▪ Runs one or more phases plus background and data reset operations.▪ Can be run independently of other stages
Phases: <ul style="list-style-type: none">▪ Smallest increment of the pipeline▪ Each takes input data, performs actions based on rules and produces output

STAGES OF COMPENSATE AND PAY SEQUENCE

Stages of the Compensate and Pay Sequence:

Classify: Compares transaction fields to category classifiers as specified by the classification rules. When there is a match between a transaction field and a classifier, the transaction is classified. The transactions are grouped based on transaction entries that match the classifiers. Transactions may classify multiple times.

Allocate: The classified transactions are processed by Credit rules using direct transaction assignments, territory requirements, conditions, and roll relationships to allocate credits to position assignments. Credits are then summed by Primary Measurements.

Reward: Secondary Measurements are calculated from previously calculated measurements or other comp plan elements. Incentive values are determined, and Deposit amounts are created and marked with deposit release information.

Pay: Deposit amounts are compared with balances in the Balance table, then combined to generate payments that are the sum of Deposits and Balances. Pay may be repeatedly run to review payment results until these payment results are appropriate. After transactions are processed, the first four stages calculate as the Compensate and Pay sequence.

Additional Calculation Stages

Post and Finalize are additional Calculation stages that mark calculations from the Pay stage as permanent and close the period.

Post: Before calculating Post, it is recommended to review Pay stage results to ensure accuracy. Post labels the pay results as “Posted,” meaning the payment information cannot be reset. Posting results cannot be undone. Within a period, payments can be posted as often as desired. When Post is calculated, the incremental deposit difference is sent to payroll.

Finalize: Finalizing periods stops any new compensation from being paid in the current period. Further transactions, credits or deposits can be processed in a finalized period, but any values that are calculated will be marked as a balance for payment, in the next open period. Finalizing a period cannot be undone.

CALCULATION PROCESSING MODE

Depending on the objective of the Pipeline run, some transactions may not require processing every time a Pipeline is run. Different processing modes may be selected, according to your needs.

Processing Mode Types:

1. Process all transactions for all Positions (Full Mode)
2. Process new and modified transactions & credits for all Positions (Incremental)
3. Specific Position or Specific Position groups

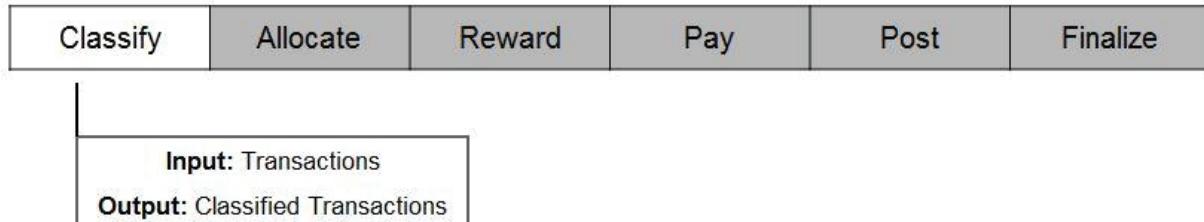
Running a calculation:

- If Processing Units are enabled, the calculation can be run by the Processing Unit.
- If using multiple calendars, specify the calendar being used, to run the calculation.
- Choose the specific Period being used.

Notes:

CLASSIFY STAGE

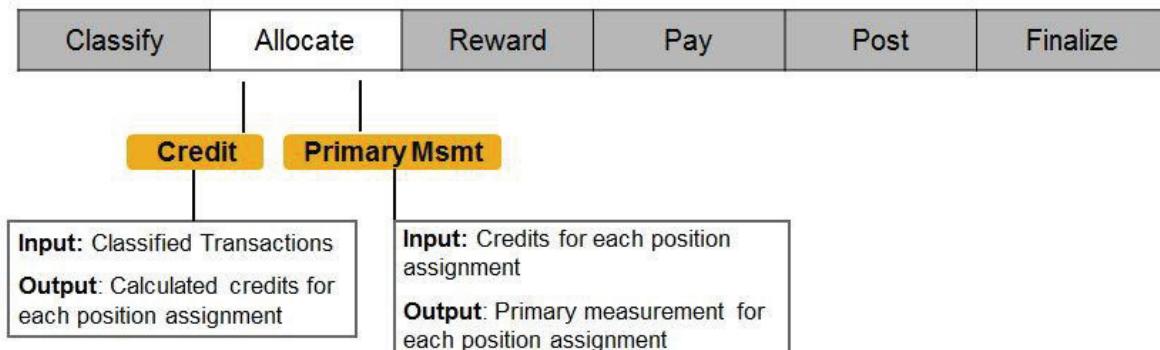
Inputs to the Classify stage are transactions stored in SAP Commissions. The Classify stage uses classification rules to determine how to bundle/bucket the transactions by using categories and classifiers. After meeting the condition in the Classification rule, the output is classified transactions.



Notes:

ALLOCATE STAGE

During the Allocate stage, direct and indirect credits are allocated to positions. The primary measurements then aggregate credits in business defined groupings.



Best Practice:

- Use the “Credit identified on the Transaction” option with the credit rule, which chooses the transactions with assignments
- With large transactions amounts, have classified transactions at the allocate stage

Avoid:

- Help credits
- Manual credits
- Tagging too many transactions to the same Order (Example: 1 Order – 8k transactions)
- Too many Rollup/Rolldown at the credit level

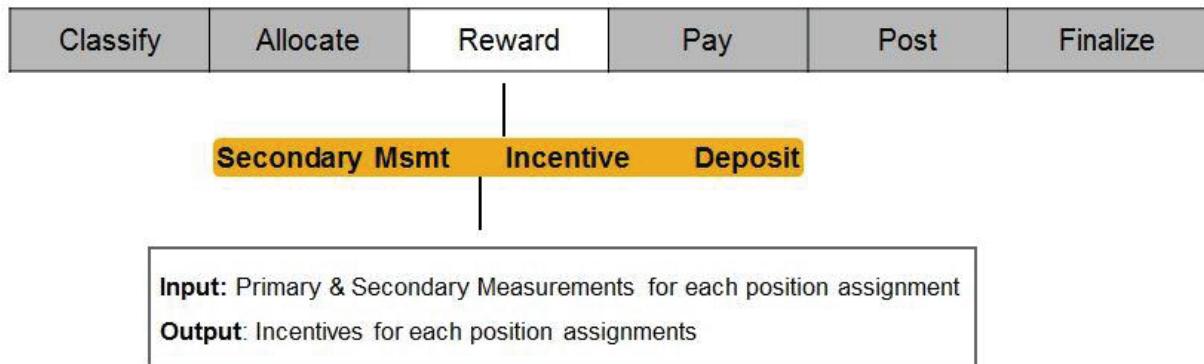
Special case: For a same position/Payee combination, with Allow duplicate false on the Credit rules If there are 2 Credit Rules with same Event type and Credit Type, ONLY one credit rule will be fired, and which rule is fired is random.

REWARD STAGE

Secondary Measurement

During the Reward stage, SAP Commissions calculates secondary Measurements, incentives and deposits using any of the following methods:

- Calculating values based on formulas.
- Aggregating primary measurements based on secondary measurement rules.
- Aggregation of other secondary measurements.
- Summation of secondary measurements in prior periods.



Notes:

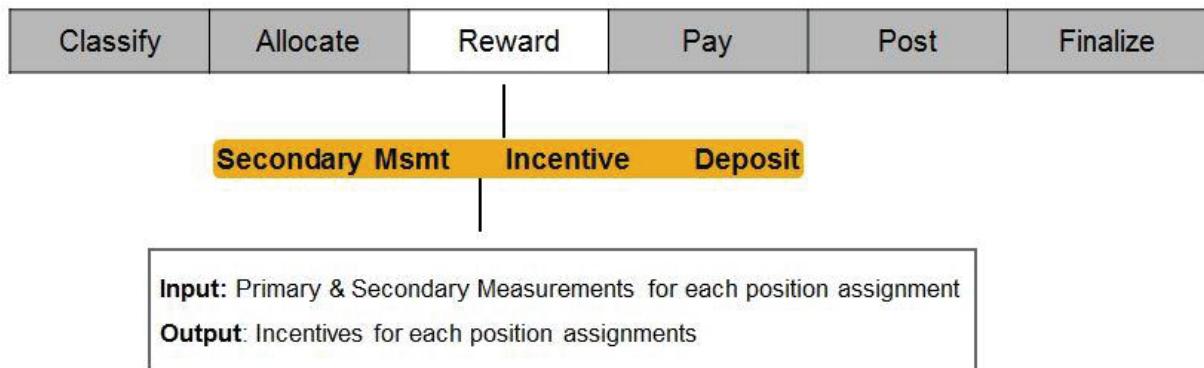
REWARD STAGE: INCENTIVES AND COMMISSIONS

The Reward stage calculates potential earnings (incentives and commissions) by comparing primary or secondary measurements against the incentives for each position assignment, in a compensation plan.

Commissions results (Commissions Workspace) are generated on a per credit basis, compared with Incentives results (Incentive Workspace) that are calculated on an aggregate.

Note: Commissions Incentive rules contain Commission Results (Per Credit) AND an Incentive results (aggregate)

SAP Commissions calculates incentives, other inputs from Primary Measurements, secondary measurements, or a mix of these to determine which are to be paid. Then they are converted into deposits.



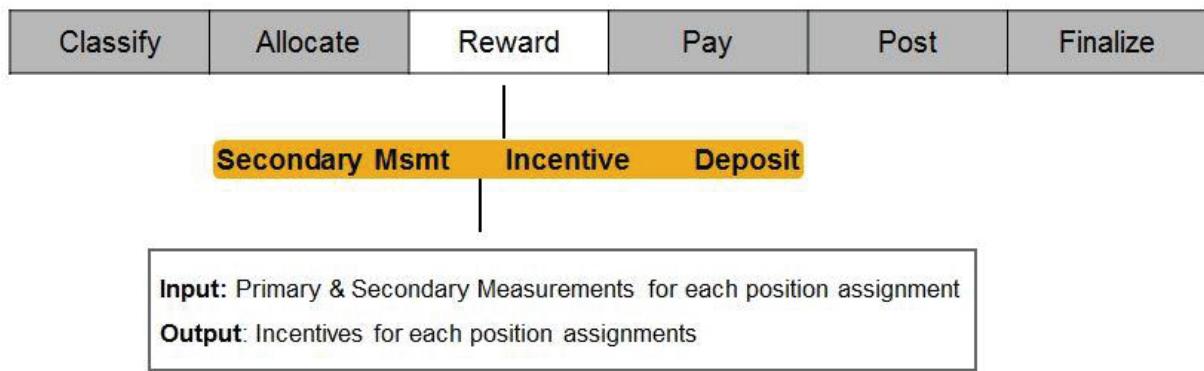
✍ Notes:

REWARD STAGE: DEPOSITS

The Reward Stage calculates the incentives to be paid and then converts them into deposits. A deposit is an amount of compensation, calculated for a position, for the period, for which the pipeline is run.

SAP Commissions calculates the amount of incentive earnings that will be deposited and when the deposit can be made. For example, a deposit may be held for an unpaid customer invoice or a deposit may exceed a maximum earnings policy for a product. Hold conditions and release dates may be specified in deposit rules.

Deposits are typically associated with an earning group, that is specified in the Deposit rule.



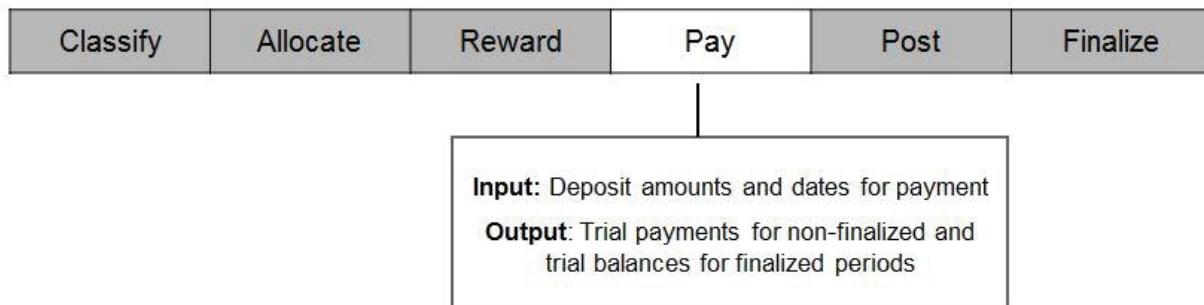
Notes:

PAY STAGE

During the Pay Stage, deposits for each position/payee, are aggregated by earning group, and trial payments are created. Deposits are current period earnings. A Payment is the Deposits for a period by earning group plus or minus any balances for that earning group from a prior period.

A trial payment is the potential payment amount for a participant/position for a specified period. You can review trial payments and balances and then recalculate the trial payments until the results are satisfactory. Each time you run the Pay stage, a background reset operation deletes previously calculated trial payments.

Run the Post stage to convert the trial payments to posted payments and permanently store them.



Notes:

BALANCE

- No more payments can be made to positions when a period is finalized
- The difference in the amount owed to a position and the amount already paid is stored as a balance
- Payments are paid at the position level and balances are segmented by position not participant

 **Notes:**

NEGATIVE PAYMENTS

- Negative payments may occur
- Negative balance is carried forward to subsequent periods
- Best practice to set “Allow Negative Payment” as OFF

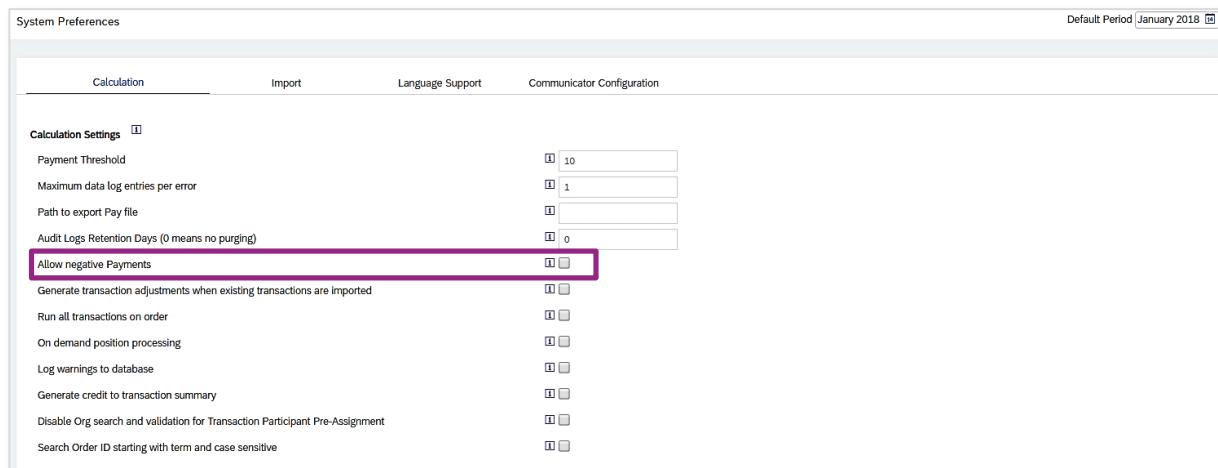
 **Notes:**

ALLOWING NEGATIVE PAYMENTS

If the “Allow negative Payments” label is “ON”, the negative payment is paid in the current month (basically rep owes money). This is rarely the desired state.

If the “Allow negative Payment” is **OFF**, the negative payment is stored as a balance and applied in subsequent open months. For example, if a rep has a -\$5,000 balance and earns \$2,000 in the current month, the rep would be paid \$0 in the current month and the outstanding balance would be -\$3,000. This would continue until the full value is recouped. This is recommended.

Best practice: Always choose “Allow negative Payments OFF”. This is accomplished in the System Preferences workspace.



Notes:

POST STAGE

Payments and balances from the Pay stage are permanently stored (marked as posted).

Posted payments and balances are made available to the finalize stage and written in an output file.



✍ Notes:

POST STAGE

The Post stage allows the flexibility to generate multiple payments for a participant, for a period. For example, on October 15 you might:

1. Run the Reward stage to generate deposits.
2. Run the Pay stage to generate trial payments from those deposits. Since payment does not go to the participant until the Post stage is run, you can run the Pay stage multiple times and adjust factors or calculations before posting the payments.
3. Run the Post stage to save the trial payment as a posted payment. A posted payment is the amount to be paid out to the participant; it is written to the database and cannot be modified.
4. Re-run the Reward, Pay, and Post stages for the entire period of October to generate another round of payments for the second half of the month. You might choose to re-run these stages. For example, if you have additional transaction data for the period. The new transactions result in increases in attainment, measurements, and so on.

The payment, for the second half of the month, is the payment for the entire month minus any payments, already paid for the period. For instance, if you paid Mary Smith \$500 on Oct. 15, and the calculation for the entire period of October is \$750, then her Oct. 31 payment is \$250.

You now have two October payments posted for each participant in the groups for which you ran the pipeline stages for the period, one for Oct. 15 and one for Oct. 31.

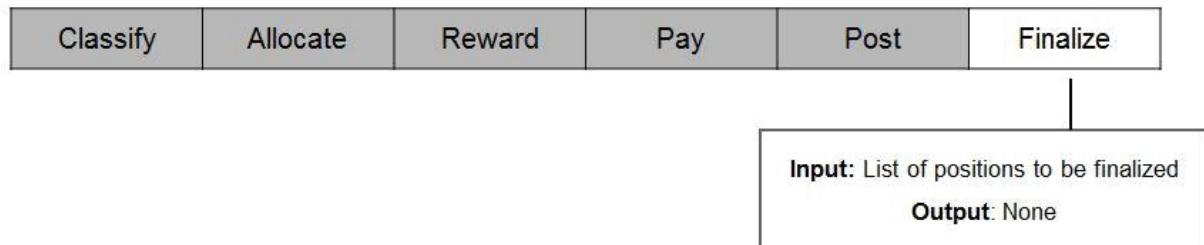
Note: If the trial payment for an Earning Group is negative, the Post stage does not modify it. A trial payment that is negative when the Post stage is run is left as a negative trial payment. It will be converted to a negative balance when you run the Finalize stage.

Likewise, a positive payment will not be posted if there are negative balances in the Earning Group that cannot be offset with positive payments.

FINALIZE STAGE

SAP Commissions closes payments for a period. This includes all payments for a period, or selected positions. SAP Commissions marks positions in the Positions table as closed. When the Pay stage runs, it checks this setting and allows payments only for open positions. Balances are only calculated for closed positions.

The Finalize stage also converts any negative incremental deposits remaining after the Post stage to negative balances, containing a status of 'posted'. Negative payments can also be exported if a system is configured to do so.



✍ Notes:

FINALIZE POSITION GROUPS

If the Deposit, Pay, and Post stages for a finalized Position Group are run, the results are saved as balances, rather than payments. Balances are carried forward to the next, non-finalized period, where they are added to the new payments. This happens only when the Pay stage is run for that period.

Note: Balances are available for **ANY** open periods and the Pay stage for the periods to be included should be run first.

For example:

1. Run the Finalize stage for October for the Position Group to which Mary Smith's position is a member.
2. More transactions are received for October, so you run the Reward stage again and Mary is allocated an additional deposit of \$100.
3. Run the Pay stage for October—the \$100 deposit is stored as a trial balance. (If other Position Groups are not finalized, their results are stored as payments, because these participants can still be paid for October.) When a balance gets pushed forward, it doesn't automatically go into the next non-finalized period. It becomes available for a non-finalized period.
4. Run the Post stage for October—Mary's trial balance is saved as a posted balance. It is now available to be used in calculations of her November payments. (Trial balances are not picked up by the Pay stage.)
5. Run the Reward stage on November 15 —a \$400 deposit is calculated for Mary.
6. Run the Pay stage—Mary's balance of \$100 from October is added to her deposit of \$400 for November, resulting in a trial payment for November of \$500. This becomes a posted payment when you run the Post stage.

The order of operations and the order of periods are key to understanding where balances will be moved and applied.

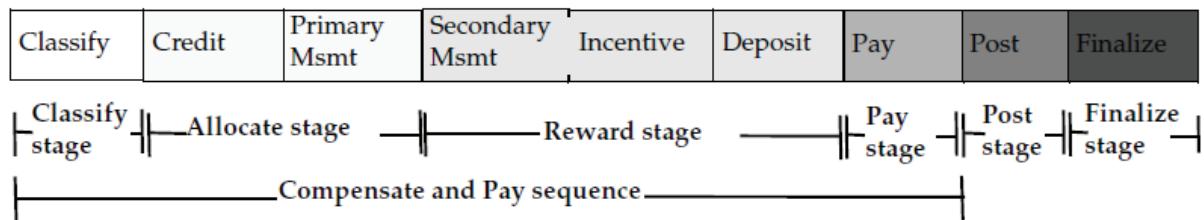
RUNNING A PIPELINE

The processing model used by SAP Commissions is the Pipeline. The Pipeline performs processing tasks to import data, process compensation, and create payments and balances. Running a pipeline is key not only to compensation; but impactful to Dashboards, Reports and other reporting systems.

It's critical to run pipelines on a consistent schedule and to know the sequence of those pipelines to ensure the calculation aligns with the appropriate payments in the correct period.

To calculate compensation or create payments, run one or more of the pipeline stages. A stage runs one or more stages, plus background and data reset operations. Each stage may run independently of other stages. One stage may be run multiple times, although the preceding stages must be run first.

The diagram below shows the pipeline. Each stage consists of one or more of the conceptual stages, discussed in the previous sections.



Functionally, the pipeline has three segments which are driven by processes, Classify, Compensation, and system-defined stages.

1. Classify
2. Compensation
3. Pay, Post, Finalize

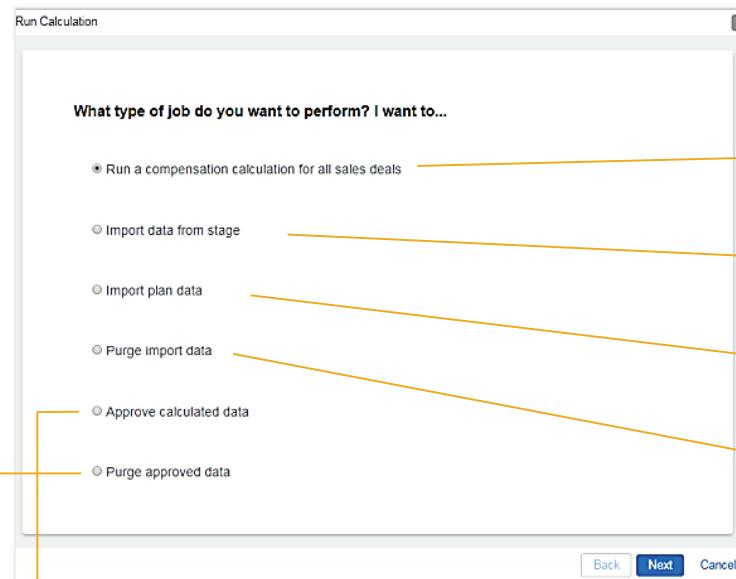
Note: If a stage hook is incorporated, (a custom process run before or after a stage), associate with a stage name, not a sequence. If a stage hook is active, it runs whenever the associated stage is run.

RUNNING A PIPELINE: SYSTEM OVERVIEW

To run a pipeline, click the Run icon, then click Pipeline and then click the “Run a Pipeline” icon.

Pipeline										
Pipeline Summary										
Start Time	Run Stage	Period	Status	Stop Time	Mode	Date Submitted	Date Scheduled	Position Group		
1/31/2019, 9:44 PM	Compensate And Pay	March 2018	Successful	1/31/2019, 9:45 PM	Full	1/31/2019, 9:40 PM				
1/31/2019, 9:42 PM	Compensate And Pay	February 2018	Successful	1/31/2019, 9:43 PM	Full	1/31/2019, 9:40 PM				
1/31/2019, 9:40 PM	Compensate And Pay	January 2018	Successful	1/31/2019, 9:42 PM	Full	1/31/2019, 9:40 PM				
1/31/2019, 9:17 PM	Compensate And Pay	January 2018	Successful	1/31/2019, 9:19 PM	Full	1/31/2019, 9:17 PM				
1/30/2019, 2:29 AM	Compensate And Pay	March 2018	Successful	1/30/2019, 2:31 AM	Full	1/30/2019, 2:26 AM				
1/30/2019, 2:27 AM	Compensate And Pay	February 2018	Successful	1/30/2019, 2:29 AM	Full	1/30/2019, 2:26 AM				
1/30/2019, 2:26 AM	Compensate And Pay	January 2018	Successful	1/30/2019, 2:27 AM	Full	1/30/2019, 2:26 AM				
1/30/2019, 1:47 AM	Compensate And Pay	March 2018	Successful	1/30/2019, 1:49 AM	Full	1/30/2019, 1:43 AM				
1/30/2019, 1:45 AM	Compensate And Pay	February 2018	Successful	1/30/2019, 1:47 AM	Full	1/30/2019, 1:43 AM				
1/30/2019, 1:43 AM	Compensate And Pay	January 2018	Successful	1/30/2019, 1:45 AM	Full	1/30/2019, 1:43 AM				

Then you'll have to decide the type of pipeline you would like to run.



Most common pipeline to run.
This calculates compensation.

Used to import a “Batch” file from the ODI dropbox.

Used to import XML logic.

Used to delete batch information from the stage tables because it is not automatically removed after import.

Approve Calculation Data creates a new dataset that can be leveraged in dashboards as “approved” data. You can control what data is pushed into this dataset, so they can determine what data Sales Reps can see via the dashboard. This removes real time functionality, meaning only approved Pipeline data is displayed via the dashboard.

Purge Approved data wipes out the dataset/results from the Approve Calculated Data Pipeline run.

RUN CALCULATION: PERIODS

SAP Commissions will direct users through each pipeline step: Periods, Stages, Position, Options Loggings and Schedule.

Periods

Do you want to run calculation for multiple periods? If yes, it is best to run a quarter at a time.

Choose the Calendar and Period.

✍ Notes:

RUN CALCULATION: STAGES

Stages of the Pipeline must be selected each time the Pipeline is run. In the Pipeline Workspace, the Compensate and Pay sequence is presented as a high-level option, containing the component stages Classify, Allocate, Reward, and Pay. Compensate and Pay can be selected and any of the component stages may be deselected. This functionality allows the Pipeline to be managed more efficiently, based on processing needs. For example, if Compensate and Pay have been run, and an error has been identified, related to an incentive, a change can be made, and the Pipeline can be rerun, starting at the Reward stage. This will save a significant amount of processing time.

Select which stages you want to run. I want to...

Run an individual Compensate and Pay stage

Classify transactions

Allocate credits and calculate primary measurement values

Calculate secondary measurements, incentives, and deposit values

Calculate payments and balances

Generate Statements

Update Analytics

Post payments and calculate balances

Undo Last Post Run

Finalize payments for a period

Undo Last Finalize Run

Reset Data

Clean up deferred results for period

Additional options:

Deferred reset Run statistics Remove stale results

Notes:

FINALIZING A PERIOD

If Processing Units are **not** enabled, finalize either a group of positions or all positions for a period. If finalizing all positions in a period, the period displays as finalized in the Calendars workspace.

If Processing Units **are** enabled, you cannot finalize an entire period. Instead, you finalize all positions assigned to the specified Processing Unit for the specified period.



Notes:

RESETS AND DEFERRED RESETS

Resets remove Pipeline data that is no longer required. Each time the Compensate sequence runs in Full mode, data for the period is automatically removed for each stage in reversed order. Time allowed for processing compensation is generally short. To allow companies to process compensation in a brief window of time, SAP Commissions offers a *Deferred Reset* that may be selected from the Pipeline workspace. Deferring the reset allows data to be marked as reset in the database without physically deleting it. Failing to delete the data will eventually cause the database to become full of unnecessary data causing it to run slowly. Deferred Reset Rules are specific to the running Pipeline mode.



Notes:

RESETS

During a normal Compensate sequence, the reset removes data associated with Payments and Balances. Reward, allocate, and Classify are next. Unless the Validate reset is selected explicitly, it does not run. Data entered manually into SAP Commissions is not reset.

- Delete, sets to zero, or nullifies results data
- Resets clean the database so that the specified Pipeline stages can populate the database with new data
- The reset processes are organized sequentially: earlier resets call later resets, but not the other way around
- When a reset is run, it resets data related to the specified period only
- The normal order of stages: Validate, Classify, Allocate, Reward, Payments, and Balances. Each stage for Validate to Payments and Balances has its own reset.

Additional Options

Deferred Resets allow SAP Commissions to retain prior data, however, marks it as invalid. It can be run and cleaned from the user interface. Deferred Resets is enabled by default.

Run statistics is checked by default.

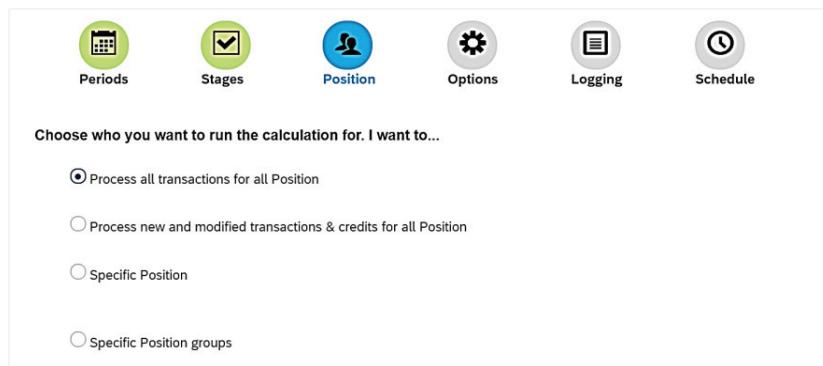
Remove Stale Results allows you to remove old results or results without associated data from the pipeline report. If customers have movement in their organizational structure, it is recommended this option is enabled for calculation runs.

 **Notes:**

PIPELINE MODES

There are four Pipeline modes:

- Process all transactions for all Position (Full Mode)
- Process new and modified transactions & credits for all Position (Incremental)
- Specific Position
- Specific Position groups



✍ Notes:

RUN CALCULATION: POSITION

Depending on the objective of the Pipeline run, not all the transactions may need to be processed every time a Pipeline is run. Different processing modes may be selected according to the compensation needs. For example, if the Pipeline needs to be run for all transactions and all Position Assignments, select the Process all transactions for all Position mode.

In other circumstances, Pipeline processing time may be shortened by selecting one of the other processing mode options. This allows the Pipeline time to be minimized while producing the results data required. For example, after a Full mode run, the Pipeline may be run only added or changed transactions or for specific position assignments.

 **Notes:**

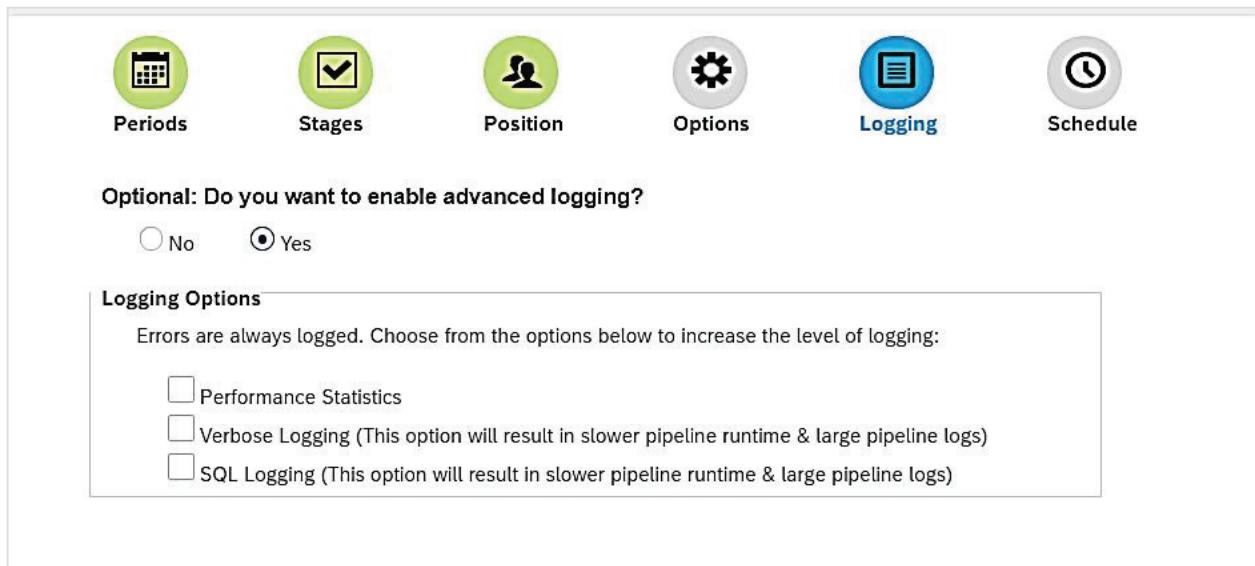
RUN CALCULATION: LOGGING

Performance Statistics enables you to receive advanced performance statistics and logging results.

Verbose Logging gives you detailed calculation logging with rules and positions errored.

SQL Logging gives you details the calculation breakdown and details of when that rule was evaluated and how it was evaluated.

Running Advanced Logging will increase the pipeline time.



Notes:

RUN CALCULATION: SUMMARY

In the last prompt, SAP Commissions will ask “When do you want to run this?” Run Now or Schedule to run on the following time are the available selections.

Review the summary of the choices made previously. If all is correct, click “**Start**” to run the pipeline.

RUNNING A PIPELINE DEMONSTRATION

Notes:

RESULTS AND LOGS

The Pipeline is typically run at least once per calendar period. This generates results data that is viewable for each Calculation phase based on compensation processing for each period. Using the associated results Workspaces, compensation can be tracked from transactions to payments for specific periods.

Once a Pipeline is run, a summary of the results in the **Pipeline Details** pane displays.

The **Pipeline Details** pane provides information regarding **Stage Statistics**, **Errors** and **Logs**.

The screenshot shows the Pipeline Details pane with three tabs: Stage statistics (selected), Errors, and Logs. The Stage statistics tab displays the following information:

Stages		
Run status: Successful (0 errors & 0 warnings)		
XML Import stage	Errors: 0	Duration: Less than a minute
Imported		
PMO_Dis_Activation_Mensuelle month Q2D		
Distributed		
DR_Dis_Activation		
DO_Dis_Activation_Mensuelle month Q2D		
PNR_Dis_Activation_Mensuelle		
UJ_Activation_Mensuelle		
EDD_Dis_Activation_Mensuelle Q2D		
DR_Dis_Activation_Mensuelle		

At the bottom, it shows Start time: 8/4/2017, 12:08 PM and End time: 8/4/2017, 12:08 PM, Duration: 1 Minute.

The Errors and Logs tabs are empty.

✍ Notes:

RESULTS AND LOGS

You can generate and view results data for each Pipeline stage based on compensation processing for each period. Results data is associated with the period for which the pipeline was run, not with a date.

You can trace a participant's compensation from payments and deposits back to the original credits and transactions that contributed to the compensation. For example, from the Positions workspace, you can click Related Search to find the credits and deposits that were related to that position assignment in the last Pipeline run for the period. You can then find the transactions and payments that are related to those credits and deposits. You can then make corrections to the results data using any of the actions detailed in the image below.

Object	Action	Description
Transaction	Create	Create a manual transaction so that a participant can receive credit.
	Modify Details	Modify an existing transaction so that a participant can receive credit.
	Adjust Value	Correct the value of an existing transaction and assign credit based on the updated transaction. When you adjust the value of a transaction, TrueComp Manager creates an adjustment record.
Credit	Create Manual	Manually create one-time credits.
	Copy	Copy a credit from one position assignment to another.
	Transfer Credit	Transfer a portion of the credit paid from one position assignment to another.
	Put hold on	Put a hold on an existing credit.
Deposit	Create	Create a manual deposit so that a participant can receive credit.
	Modify details	Modify an existing deposit so that a participant can receive credit.
	Put hold on	Put a hold on an existing deposit.
	Set release date	Set a date for the release of a deposit that is held.

Note: If you adjust/modify a Calculated Credit or Deposit, your adjustment will be stored with that adjustment and will never go back to the originally calculated amount with pipeline reruns. You must reset a Calculated Credit or Deposit that was adjusted for it to begin calculating as the rule would.

DEPOSIT AND PAYMENTS

The Deposit Workspace displays amounts to be paid to each position assignment. These amounts are processed by deposit rules, manually created, or imported.

Payments represent the incremental deposit amounts for payment for a specified fiscal period. Balances are payment amounts, generated for finalized periods. These amounts can be positive or negative. SAP Commissions can be configured to allow negative payments. If it is not configured, the payment is converted to a negative balance and is carried forward to subsequent periods, until it is balanced against positive deposits.

The Payment Workspace Summary View displays total earnings and payments for a given earning group by period for a Payee. The Detail View displays each individual payment, per earning code, that makes up the total for the period. Additional information in the Detail View includes whether the payment has been calculated, posted, or balance applied.

 **Notes:**

SUPPORTING DETAILS

Payments represent the incremental deposit amount or negative amount that has not been offset to be paid for a specified period. Balances are payment amounts generated for finalized periods.

A Balance created in a Finalized period will only carry forward into the next open period, when that balance is posted. Therefore, if a customer does not Finalize their periods, the balances/negative payments will forever stay in that period.

The Payments Workspace displays a summary of all the payments and balances calculated for Position Assignments during the Calculation. The Supporting Detail tab allows users to trace back from payments through Deposits, Incentives, Measurements, and Credits to reconcile payment amounts.

Notes:

PAYMENTS AND BALANCES

- New incremental deposits are created if calculations are needed after payments have been posted.
- Trial Payments and Trial Balances are calculated in the Pay Stage.
- Posted Incremental Deposits, Payments, and Balances occur in the Post stage.
- Applied status indicates that the balance has been used in the calculation of a posted payment.

 **Notes:**

PAYMENTS AND BALANCES

The example below demonstrates how five different Calculations impact payments and balances over time:

1. The first calculation generates a posted payment of \$100 for January. This means that \$100 has been sent to payroll from SAP Commissions.
2. The second calculation shows that there are additional earnings that need to be paid for January. This is an incremental deposit. When Post is recalculated, the incremental amount will be posted and an additional payment of \$20 will be paid for January.

Finalized was also run meaning that no additional payment can be made for January.

3. The third calculation identifies a trial payment of \$200 for February. This payment has not yet been posted, so no actual payment has been made. Users may review results and recalculate if necessary.
4. The fourth calculation, while done in March, is for the January period. The deposit indicates that earnings have decreased (error correction). When Post is run as part of this Calculation, a negative \$10 balance will be posted and rolled over to the next open period (February in this case).
5. The fifth calculation shows that earnings for February remain at \$200, but when Pay and Post are run, the negative \$10 balance is applied resulting in a payment of \$190 for February.

Pipeline Run Date	Pipeline Period	Deposits	Trial Payments	Posted Payments	Finalized	State
1/31/2019	January	\$100	\$100	\$100		
2/15/2019	January	\$120	\$ 20	\$ 20	Yes	Incremental Deposit
2/28/2019	February	\$200	\$200			Trial Payment
3/05/2019	January	\$110	(\$10)	(\$10)		Posted Balance
3/15/2019	February	\$200	\$190	\$190		Applied Balance

MANUALLY ENTERING TRANSACTIONS, CREDITS, AND DEPOSITS

Transactions, credits or deposits can be manually created, modified, or adjusted.

Data can be:

- Imported from source systems
- Credits and Deposits calculated by plan rules
- Entered manually through the user interface

 **Notes:**

BEST PRACTICES

1. It is strongly recommended that you always run full pipeline
2. Understanding the purpose of each stage ensures that you run the right stage sequence to make sure the changes are reflected
3. To clear any specific data (classify, credits, measurement, incentives, deposits) make sure you run the right reset and run the respective Pipeline stage which would repopulate the data and generate accurate results
4. Only use Incremental and Position Pipelines in testing
5. Before running a Pay and a Post, always precede with a full Pipeline
6. Always set up Position Groups so that you have an option to finalize per Position Groups, even if you don't use them
7. Only use Advanced Logging when troubleshooting a problem as it increases the pipeline time.
8. If you have any amount of errors in your pipelines during production, check the plan rules for errors.

LESSON 6 REVIEW

In this lesson, we reviewed the following topics:

- Pipeline Calculation Process
- Results Data
- Payments and Balances
- Manual Orders, Transactions, Credits and Deposits

 **Notes:**

Lesson 7: Additional Topics

LESSON 7: ADDITIONAL TOPICS

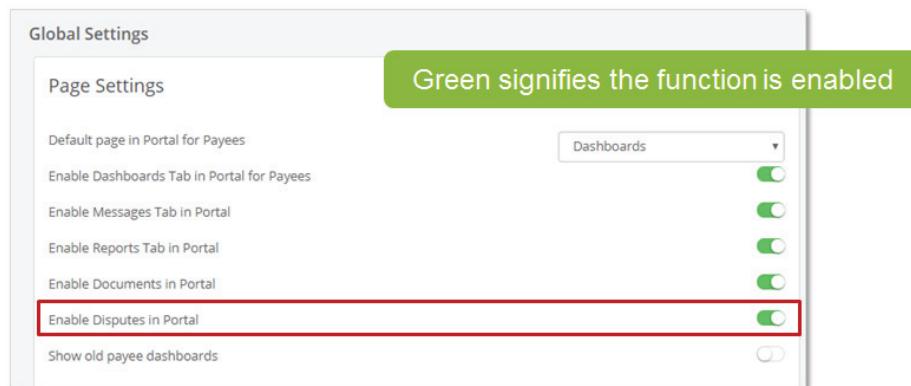
Lesson 7 Objectives

- Explain the capabilities of the Plan Communicator tool
- Discuss Disputes
- Demonstrate how to create a dispute template
- Discuss Dashboards
- Demonstrate how to create a payee dashboard

ENABLING PLAN COMMUNICATOR

In order to use the Plan Communicator and Disputes tool in Commissions, you must first enable it in the Sales Performance Home within the Global Settings tile.

To enable it, access Sales Performance Home, click Global Settings and then ensure the button across from the tools you want to use is set to green. Green signifies the function/tool is enabled. Click the Save button at the bottom of the page after you've made changes to the settings.



PLAN COMMUNICATOR

The Plan Communicator has been designed to help compensation Administrator's manage the compensation plan document acceptance process.

Plan Communicator Functions:

- Create plan documents
- Create and distribute plan documents
- Track the acceptance of plan documents
- Create and Track Disputes (we will discuss this is a separate section)

Three sections to Plan Communicator

- Distributions
- Distributions Tracking
- Documents

PLAN COMMUNICATOR: DOCUMENTS

The Documents workspace allows the Administrative user to create a variety of documents and upload existing documents as well.

SAP provides a few standard document templates.

Compensation plan documents or policy documents are the most common types of documents created by compensation administrators.

There are two **Form Type** options in the Documents workspace: “**Plan**” and “**Other**”

- Administrators can link the document to a compensation plan already created in the system by selecting “**Plan**” in the form type drop down. This will allow them to pull plan data into the document to make the document creation process easier, faster and more accurate.
- “**Other**” provides the ability to **upload** documents created outside of SAP to include as an attachment in a future distribution. A common example is uploading a standard companywide Terms and Conditions document.

DOCUMENTS WORKSPACE DEMONSTRATION

The Document workspace works much like Microsoft Word. You can use the toolbar to customize the form, insert a logo, and change the formatting to best meet your business need.

Once you select the compensation plan within the document content section, it will populate compensation elements that are used within that plan. The administrator can then insert those values within the document.

Creating the document in this workspace makes it easier to pull specific plan data into the document.

- When moving a formula over to the document space, it displays the defaulted calculated value, as opposed to the expression.
- Documents' header and footer are supported at the individual document level.
- To hide currency visit System Preferences and enable the option to hide the currency symbol on plan documents.

PLAN COMMUNICATOR: DISTRIBUTIONS AND TRACKING

Distributions: In this workspace the Administrator can create specific distribution group(s) for the specific document created in the Documents workspace. The Administrator can specify Payee and Approver Acceptance requirements and set reminders.

Benefit of separate distributions: Various position groups or titles may call for different documents and acceptance settings. This way you can manage the distribution process in a customized manner.

Naming your distribution is important. You want to be specific so that the recipient understands what the document is regarding.

Distributions Tracking: Using the Distributions Tracking function in Commissions, allows you to easily keep track of distributed documents. It confirms that the document was successfully sent, and you can see the payee's acceptance in real time.

Distribution and Distribution Tracking Demonstration

Notes:

DISPUTES

The Disputes function in Commissions has been designed to help all areas of the sales process to streamline and automate dispute resolution.

- Streamline the disputes process
- Provides transparency
- View status in real time

 **Notes:**

DISPUTES

How Disputes Works:

If the sales rep suspects there was an error in their compensation payment, they can submit a dispute electronically using this automated process. Once the end user submits the dispute their direct manager is notified.

The Manager can either, approve, reject or request more information regarding the dispute. The administrator can view existing disputes in the disputes tracking workspace.

Disputes Forms:

SAP provides a series of standard dispute form templates. The Administrator can also create additional dispute form templates to better meet the business need.

Usually end users (Payees) will either submit a dispute in regard to a Bonus or Deposit payout.

Notes:

APPROVING A DISPUTE

Once the End User (Payee) submits a dispute, the Manager is notified via email.

Example Email:

The screenshot shows an email from 'admin@calliduscloud.com' to 'me' with the subject 'Request: Request - Incorrect bonus requires approval'. The email was received on Aug 27 (4 days ago). The message body contains the following text:

Please review and approve the following dispute:

Reason for Request: Incorrect bonus

Participant: Michael Payne 3224471

Assigned On: 08/24/2017 02:01

Due By: 08/27/2017 02:01

URL: https://cu04-dev.callidusondemand.com/CallidusPortal/do/navigate/CNPC/base/flex/base_flex.jsp?requestType=addTab&doubleClickAction=DocumentProcess-edit&id=559009303747362817&valen=e1NIQX10WVRPM0FOVTFOR0dsMkd6TW5MdHFhbWImL0E2aVdvQ3BjRVN1elJNNzg1c0ZHTmFucm40eEE9PQ%3D%3D&showHome=true

The Manager must then enter Commissions application, by either clicking on the URL provided in the email or logging into through their normal process. If the Manager approves the dispute, it will continue in the specific dispute approval process set by the administrator. Sometimes the dispute may be routed to another level of management approval and other times it may be directly sent to the Administrator to confirm and make the appropriate changes. The Administrator configures the dispute approval process.

Next, the Manager can review the Dispute and decide whether to Approve, Deny or Request Information.

Best Practices:

- Encourage payees to pull latest reports prior to submitting a dispute to ensure they have the most current information.
- Encourage payees to attach documentation to their dispute that supports the reason for their dispute.
- Administrators should add as many custom fields to the customized dispute form templates, in order to gather as much data necessary to accurately process the dispute and reduce the amount of back and forth with the payee.

DASHBOARDS AND WIDGETS

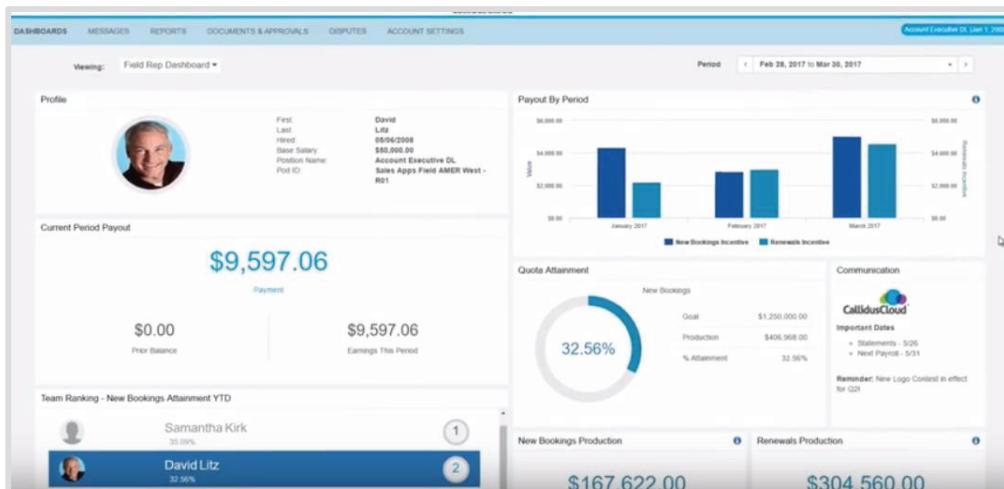
Dashboard is mainly an end user tool. It is a fast and easy way to retrieve the information that matters to the end user the most.

The Commissions Administrator is the person that will create, maintain and structure various dashboards.

Dashboard Types:

- Plan
- Title
- Global

Example Dashboard:



Dashboards contain widgets which represent a type of information. Some widgets are dynamic, which allows you to drill down the information to provide you detailed data summary explaining how the results were obtained.

The Commissions Administrator will determine which widgets are included in each Dashboard type.

DASHBOARD FEATURES

- A dashboard can be ‘previewed’ by selecting a user and a period from drop-downs. You can do this after you (the Admin) create the dashboard. This is useful to test what you created before making the dashboard go live to the end users.
- Period selector can be set to be a Period Name or Date Range in Global Settings in the Sales Performance Home page.
- A dashboard can have an Effective Date Range. This just means the end users will only be able to view that particular dashboard during that specific effective date range.
- Dashboards have a View Date, which can be set to a Past date or Future date. By default, it is the current date. This is useful for planning ahead for big month end or quarter end results.
- Multiple Positions are supported: If a payee, who is assigned to multiple positions, logs-in, he or she can select a position from a drop-down and can view the dashboard(s) specific to that position.
- Block positions or position groups if needed under release periods. This is helpful if you are having trouble with the results of only one individual. You can block their position while allowing others to view their results via the dashboard. There are two ways to block. Block from approval means the approved calculated pipeline is ignored. Blocked from viewing dashboards blocks dashboards all together from the specific position or group.
- Dashboards can be created for Custom Calendars.

DASHBOARD PREFERENCES

The Administrator can personalize the Dashboard settings within the Global Settings workspace within the Sales Performance Home page.

Dashboards are updated when the Pipeline is run. The Administrator can “enable released periods” in order to control when the Dashboard is updated regardless of when the pipeline process is run.

The “**Enable release periods**” allows the Administrator to set specific dates and time for new data to be released into the Dashboard. The Administrator can then run the pipelines without updating data within the Dashboards. This is useful if the Administrator runs pipelines often and it’s also useful to ensure accurate results. The Administrator can control when the Dashboard is updated by enabling this function.

Dashboard Personalization Settings

Enable released periods

Use Approved Calculated Data Only

Use period name in period selector

Show old payee dashboards

Hide proxy option for payees

Widget Title Alignment

Widget Title Background Color

Widget Title Font Color

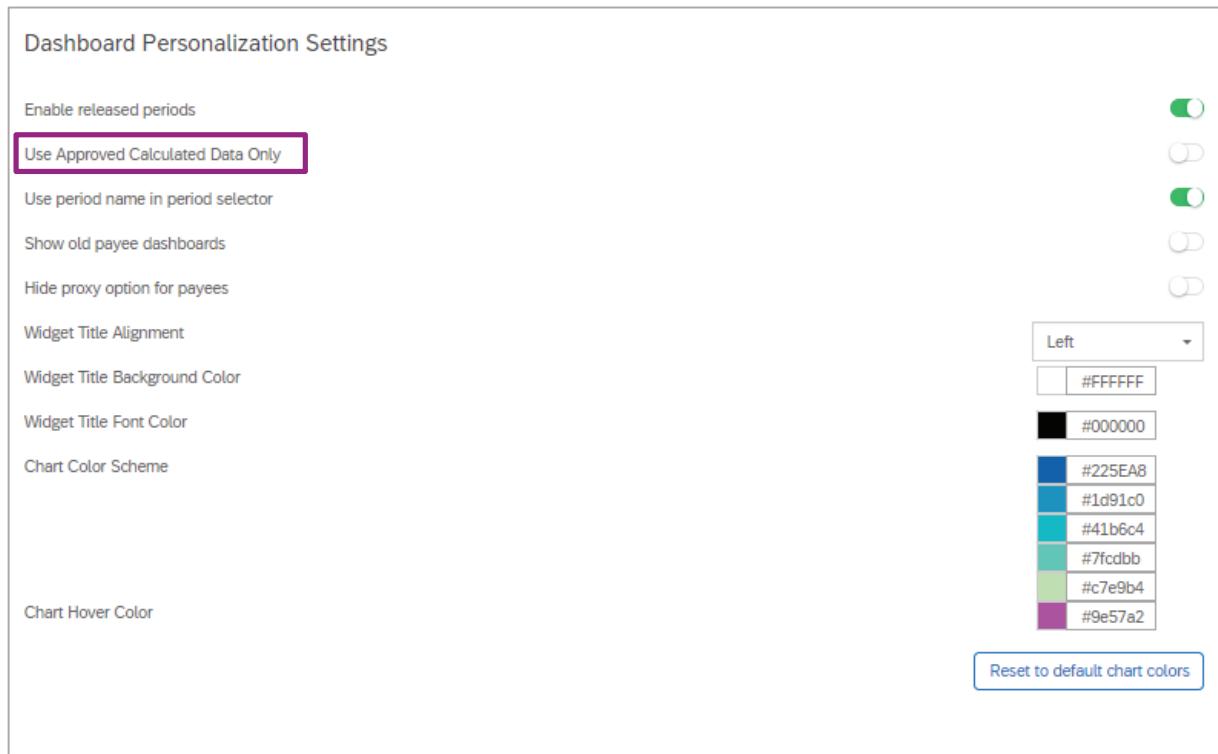
Chart Color Scheme

Chart Hover Color

DASHBOARD PREFERENCES

Approve Calculated Data is an option when you run a Pipeline. The results of this pipeline run will be shown on the corresponding dashboard IF you enable the option in this workspace.

Enabling “Use Approved Calculated Data Only” will ensure only approved pipeline data is displayed in the Dashboard.



Use Period name in period selector: This allows the Admin to name the release period.

Show old payee dashboards: This allows end users or managers to view the old format of dashboards.

Hide Proxy options for payees: This allows you to take away the ability for payees to proxy as another user.

The remaining options are formatting features.

PIPELINE RUN AND RELEASE PERIODS

Once you have enabled Approve Calculation Data you create a new dataset that can be leveraged in dashboards as “approved” data. Admins can control what data is pushed into the dataset so they can determine what data reps should or should not see as part of their dashboards.

This removes “real time” functionality, meaning only approved pipeline data will be displayed. Other pipeline run results will not display in reps’ dashboards.

The Administrator can release periods based on Processing Units and Calendars. The Payees can view the dashboards for the released periods only.

 **Notes:**

DASHBOARDS WORKSPACE

The Dashboard workspace is located in the Sales Performance Home. Below are general key tasks when creating new Dashboards.

Key Tasks:

1. Decide on the Dashboard Audience
2. Decide what type of information you would like the end user to see on their Dashboard
3. Create the Dashboard using the available widgets (located within the Dashboard workspace)
4. Proxy as the end user to view the dashboard and ensure it is correct

Dashboards can be created for a specific **Plan**, **Title**, or **Global**

DASHBOARD WIDGETS

You can use up to **8** widgets per Dashboard. There are Payee and Manager Widgets. The Administrator can create separate Manager Dashboards that contain team ranking type of information.

The **Manager Rank** widget can be configured to display & rank a manager's subordinates by a defined data type. Certain result types will support drill-down capability (Primary Measurements & Incentives). The drill-down flag appears once a supported data type is selected. Please note, the dashboard does not provide validation of whether or not the Title/Plan contains manager positions that have subordinates.

The **Leaderboard** widget allows participants to see where they fall within a ranking within their peers.

The **Aggregate** widget allows Administrators to aggregate data by multiple attributes.

The **My Team** widget can be added for a Manager, or any Position with a subordinate. The end user will see a list of subordinates and will have the capability to view any of their dashboards by clicking on them. It can be configured to drill-down the hierarchy at multiple levels. This eliminates the need for Managers to have to proxy in as their direct reports because the same information is found in this widget.

The **Personal Modeler** widget allows payees to estimate potential payment. Administrators select a single incentive rule to drive this estimation. The system will automatically pick up any directly referenced rules, for example, primary measurements or incentives for the reps to use as part of the estimate.

Table widget allows you to display tabular data on top of the Payee results.

Single KPI widget allows you to display specific performance metric data. The administrator can choose the data when configuring the widget.

Attainment widget displays the payee's attainment percentage to a specific target. The details are configured by the Administrator.

Payee Profile widget displays the payee information such as name, username, etc.

Payment widget displays the payee payment information.

Quota attainment widget displays performance metrics alongside a quota.

LESSON 7 REVIEW

In this lesson we reviewed the following topics:

- Explained the capabilities of the Plan Communicator tool
- Discussed Disputes
- Demonstrated how to create a dispute template
- Discussed Dashboards
- Demonstrated how to create a payee dashboard

Notes:

Lesson 8: Workshop

COMMISSIONS CONSULTANT WORKSHOP

Congratulations on completing the first portion of this four-day course. This one-day workshop is meant to help you place all of the Commissions key components together to not only create a successful compensation plan but also run an error free pipeline. With the knowledge that you will receive today you will be better able to help a client with their Commissions implementation.

Overview:

- Instructor will review the workshop materials and point out key areas to focus on
- As a class you will develop a compensation plan
- The instructor will use their Commissions testing environment to implement the plan in Commissions
- Test out the plan to ensure all the key components are working together as expected

Workshop Goals:

- Analyze the client's commissions needs
- Create and implement a compensation plan
- Review results data
- Discuss key findings

WORKSHOP INSTRUCTIONS

Review the six major steps to this workshop that are described below. Next, with a partner work together to complete each step. The steps are further explained in the subsequent pages of this guide.

Step 1: Analyze SmartLogic company details

Step 2: Develop one compensation plans and practice communicating the plan details to the client

Step 3: Work with the instructor to implement the plan in Commissions

Step 4: Run a pipeline and analyze results

Step 5: As a class discuss findings

 **Notes:**

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

This is the beginning of step 1. Analyze the SmartLogic company data located on the subsequent pages below. As you analyze the company data, think about the following common questions that consultants must solve for, prior to creating and implementing a compensation plan.

1. What is the company's current compensation plan?
2. What are their compensation goals?
3. What are the problems with their current compensation process?
4. Who controls the commissions and overall compensation development process?

Note your findings as you analyze the company data.

Company Background:

SmartLogic is the leading reseller of computer hardware, software licenses, maintenance and services for medium to large tier businesses. Their specialization in providing highly skilled technical services for maintenance, implementation and integration services has given them a dominant position in the reseller market.

- The company founded in 2010. Experienced significant growth in the last 18 months, from 150 to over 300 employees.
- They are headquartered in Austin, TX and have sales offices in Cupertino CA, Reading, UK and Munich, Germany.
- They sell to organizations worldwide via their direct sales force as well as selected resellers.

Key SmartLogic Players:

- Lynne Flanders, Sr. Director of Finance. Reports to CFO. New to SmartLogic, 3 months. Sales Compensation is one of her top priorities for 2019.
- Madeline MacKenzie, Director of Sales Compensation. Been with SmartLogic for 5 months. Formerly evaluated Commissions while at Lucent, which ended with a competitor.
- Kate McClellan, Technical Liaison. Been with SmartLogic for 2 months.
- Jorge Flores, Manager, Sales Operations. Been with SmartLogic for 1 year. Responsible for sales plan design.

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

 **Notes:**

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

Project Background:

- Significant growth to SmartLogic business over past 18 months, driven primarily by direct sales model.
- Annual revenue grew from ~12 million in 2018 to 15 million in 2019
- 300% growth in sales organization over past year.
- 50 Account Executives and Regional Directors today, organized across the following organizations:

North America Organization	
Telesales Representatives	<ul style="list-style-type: none">• 6 reps, serving mid to large tier companies/customers in NA region.• Hunters/ managers are regional
Districts, Regional Directors Acct Execs, Sales Engineers (overlay)	<ul style="list-style-type: none">• Focus on Fortune 500 companies• 6 Account Executives, 3 Sales Engineers, 3 Regional Directors
EMEA Organization	
Telesales	<ul style="list-style-type: none">• 1 rep, serving mid to large tier companies/customers in EMEA region.

- Sales hierarchy is typically as follows: Account Executive – > Regional Director -> Area VP -> VP WW Sales -> President. All except VP WW Sales and President are on sales comp plans.
- Other positions include: Telesales, Sales Engineers, Sales Engineer Manager, Director of Technology (reports to VP WW), Director Sales Engineers (reports to VP NA), SAP AE (reports to VP NA), Dir Services Sales (reports to VP NA) and Services AE (reports to Dir Services Sales).
- Compensation is all calculated today in Excel spreadsheets. There is virtually no reporting whatsoever. Compensation statements are often delivered via email or on post-it notes by managers to their subordinates.
- 7-9% of revenues are paid out in commissions.

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STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

Primary Business Drivers:

Sales force reporting

- Driver 1: Reduce shadow accounting: Commissions statements are distributed via email and even by managers on post-it notes. They estimate that the time spent shadow accounting could be as high as 10% of total time.
- Driver 2: Reduce commissions disputes: Customer is concerned about credit disputes by payees over specific orders/transactions. Since reps/managers have limited visibility into compensable transactions, there is frequently a spike after each pay period in disputes. Disputed transactions today are logged in a spreadsheet and sent to managers for manual reconciliation. A process that takes approximately 2 weeks to resolve.
- Driver 3: Improve dispute tracking: Disputes are all managed today via email, making it very hard to research and resolve a dispute. SmartLogic would like an automated solution to help log, research, resolve, and track disputes.

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

Management Reporting

- Sales management reporting: SmartLogic wishes to provide detailed, order-level visibility into team performance. Significant time is now spent by managers reconciling compensation disputes, primarily over disputed transactions.
- Sales Operations: Has a limited capability to provide reports to view or reconcile disputed transactions, review progress towards awards
- Finance: Spends a “significant” amount on sales compensation, with very little visibility into the return on investment and impact analysis of changes to organization, changes to plans, etc. SOX compliance and audit trail are also a concern.

Compensation Administration

- Splits are very difficult to manage. They typically occur for inbound leads; for example, a transaction may be claimed by both telesales and Field Sales organizations. This leads to frequent “double payment” of incentive.
- Accruals are difficult to manage. They are done today on spreadsheets.
- Heavy use of spiffs throughout the organization. Spiffs are also managed manually on spreadsheets. They are difficult to track and, because of the lack of any reporting solution, all the information about spiffs is delivered manually via fliers, emails, etc.
- Very difficult to make adjustments, claw backs and other prior-period adjustments.

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STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

 **Notes:**

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

Systems:

- Order entry – Oracle (heavily customized)
- HR – currently spreadsheets/Workday (go live Jan 2018)
- Financials – Oracle/spreadsheets
- Reporting standards – TBD
- Database standard – Oracle
- SF.com – sales portal
- Payroll - ADP

Orders

- Commissions and SPIFFs are typically paid off transaction-level information.
- Order information comes from Oracle. Order data is posted to a shared drive and then imported into linked Excel files for payment purposes.
- Each Account Executive closes approximately 15-20 orders per month.

Reference Data

- Participant information/sales hierarchy is managed in spreadsheets by Sales Ops.
- No current standard for employee ID – that should be changing with the new Workday HR system that is scheduled to go live in January 2020.
- Quotas are managed by Sales Operations and are set either quarterly or annually. A new quota spreadsheet comes to the commissions team every month or quarter and gets input into the commissions spreadsheets. Quotas are determined by managers after submission of each period's sales plans.
- New hire, termination, etc. data is sent manually every month from HR (could change with Workday HRIS).

Notes:

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

SmartLogic Current Compensation Plans

- Internal committee of Sales Ops, Finance and HR develop plans. HR owns the process. Finance owns the administration of sales compensation.
- 10 different plans; however, the first phase would include plans for Account Executives in North America only.

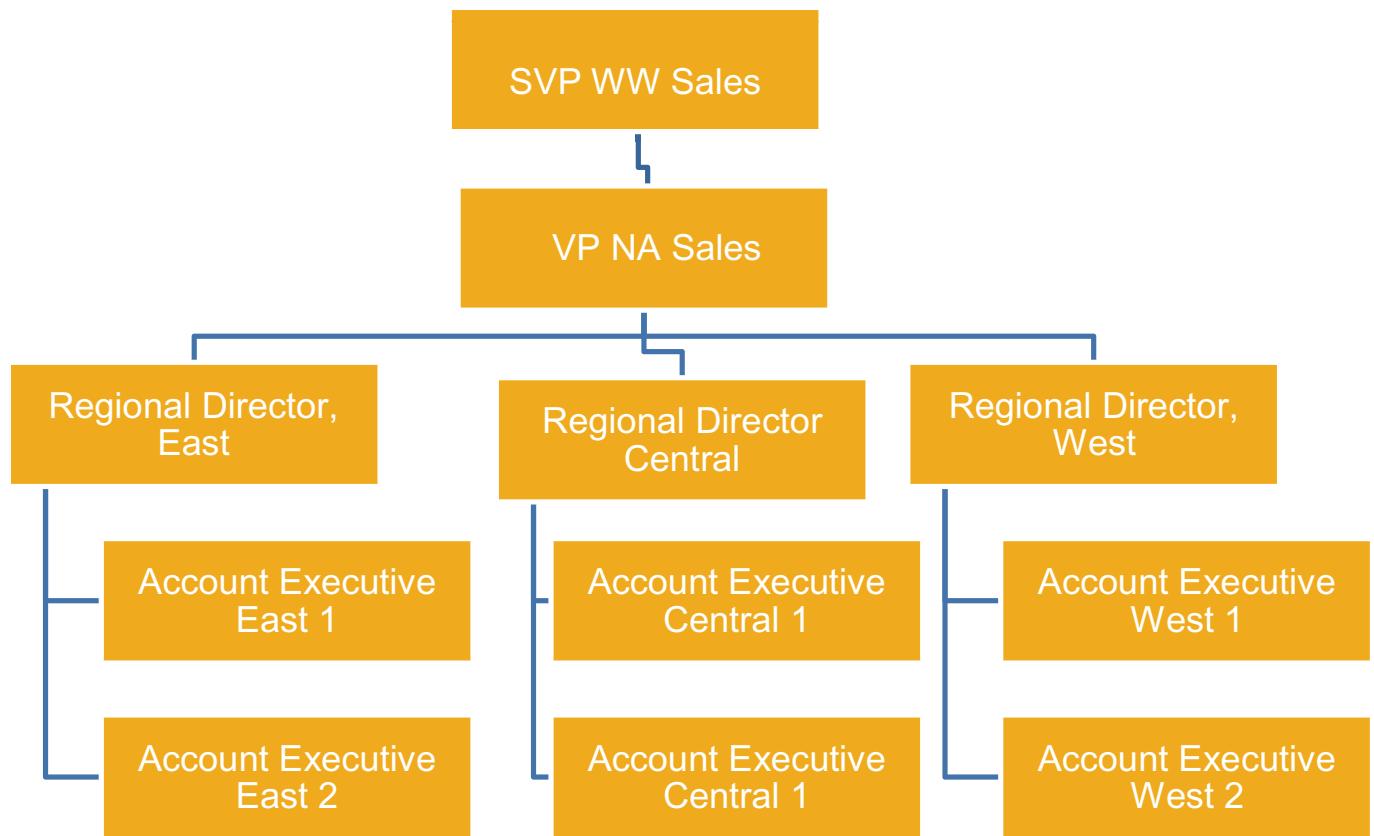
1. Account Executive Plan

- Preassigned to sales in Oracle
- Monthly commission on licenses with an accelerator once the annual quota is reached
- Monthly maintenance and service commission is a flat rate and is not dependent on a quota
- Quarterly regional bonus on combined sales of all products if quarterly Quota is reached. Paid one month after the end of the current quarter only if the AE is still in the position at the end of the quarter.

Notes:

Continued on next page...

SMARTLOGIC ORGANIZATIONAL CHART



Notes:

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

Organization Data:

Position	Last Name	First Name	Title	District	Manager
AE-E001	Yang	Dan	Account Executive	SouthEast	RD East
AE-E002	Palowski	Stacey	Senior Account Executive	NorthEast	RD East
AE-C001	Osborne	Gene	Account Executive	SouthCentral	RD Central
AE-C002	Pavan	Sanjay	Account Executive	NorthCentral	RD Central
AE-W001	Petrovic	Alex	Senior Account Executive	SouthWest	RD West
AE-W002	Whitton	Amy	Associate Account Executive	NorthWest	RD West
RD-E001	Raney	Jason	Regional Director	East	VP-NA01
RD-C001	Hernandez	Jesus	Regional Director	Central	VP-NA01
RD-W001	Williams	Barbara	Regional Director	West	VP-NA01
VP-NA01	Greg	Chen	Vice President	North America	SVP-WW01
SVP-WW01	Andy	Griffin	Senior Vice President	World Wide	

 Notes:

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

SmartLogic transaction history for January 2019

Order ID	Event Type	Comp Date	Product	Product Name	Value	Pre-Assigned Payee	Customer
605	Licenses	01/01/2019	L5000	License 5000 pack	150000	AE-W002	PC003
606	Licenses	01/01/2019	L1000	License 1000 pack	25000	AE-C001	HS004
607	Services	01/01/2019	S001	Integration Services	200000	AE-E002	FB003
608	Services	01/01/2019	S001	Integration Services	200000	AE-E001	GG003
609	Services	01/01/2019	S002	Implementation Services	5000	AE-C001	TN002
610	Services	01/01/2019	S002	Implementation Services	5000	AE-E002	SS002
611	Services	01/01/2019	S002	Implementation Services	5000	AE-C002	HS005
612	Licenses	01/01/2019	L1000	License 1000 pack	25000	AE-W001	H1002
613	Licenses	01/01/2019	L3000	License 3000 pack	75000	AE-W002	BB002
614	Licenses	01/01/2019	L4000	License 4000 pack	100000	AE-C001	CB005
615	Licenses	01/01/2019	L1000	License 1000 pack	25000	AE-E001	GG005
616	Licenses	01/01/2019	L1000	License 1000 pack	25000	AE-E001	OD003
617	Licenses	01/01/2019	L1000	License 1000 pack	25000	AE-C002	DI003
618	Services	01/01/2019	S003	Maintenance Agreement 3 year	350000	AE-E002	BB005
619	Services	01/01/2019	S004	Maintenance Agreement 2 year	300000	AE-E001	TW012
620	Services	01/01/2019	S002	Implementation Services	5000	AE-W001	HS003
621	Licenses	01/01/2019	L5000	License 5000 pack	150000	AE-E002	FB004
622	Licenses	01/01/2019	L6000	License 6000 pack	200000	AE-W002	SS004
623	Licenses	01/01/2019	L1000	License 1000 pack	25000	AE-E002	CS006
624	Licenses	01/01/2019	L2000	License 2000 pack	50000	AE-W002	OD004
625	Licenses	01/01/2019	L1000	License 1000 pack	25000	AE-E001	CS003

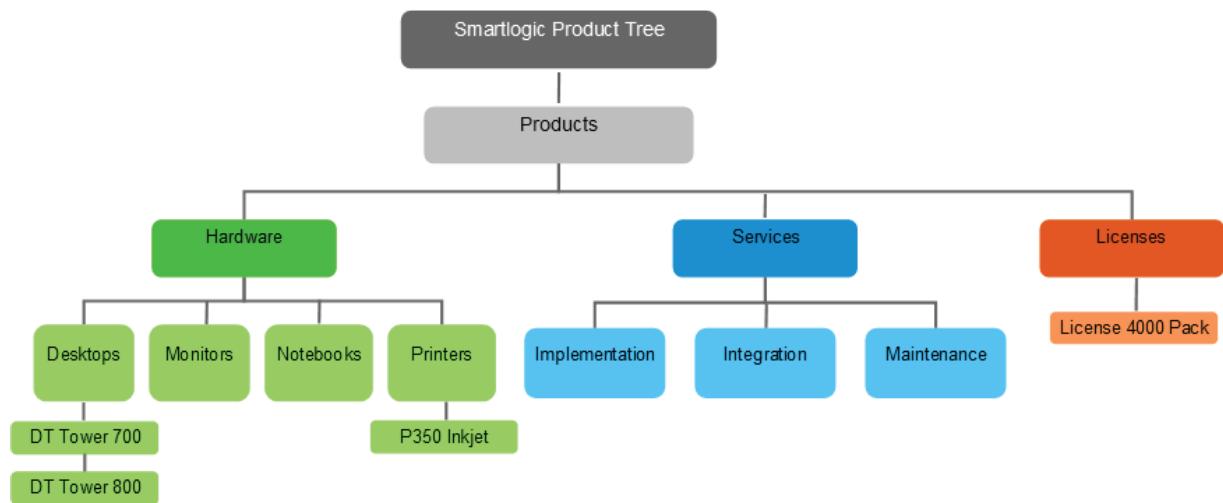
 **Notes:**

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

Product Hierarchy

The products in the table below will be organized in the hierarchy as shown:



Notes:

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

Sample Product List:

Product ID	Product Name	Price (USD)	
D002	DT Series 200	350	Desktops
D003	DT Series 300	475	Desktops
D004	DT Series 400	650	Desktops
D005	DT Tower 500	750	Desktops
S001	Integration Services	200000	Integration Services
S002	Implementation Services	5000	Implementation Services
S004	Maintenance Agreement 2 year	300000	Maintenance Services
S005	Maintenance Agreement 3 year	350000	Maintenance Services
P350	P350 InkJet	250	Printers
P450	P450 InkJet	300	Printers
L1000	License 1000 pack	25000	Licenses
L2000	License 2000 pack	50000	Licenses
L3000	License 3000 pack	75000	Licenses
M001	EG 1000	200	Monitors
M002	EG 2000	500	Monitors
M003	VM 500V Monitor	150	Monitors
M004	VM 1000V Monitor	250	Monitors
M005	VM 1500V Monitor	300	Monitors
N002	LT Series 2000	2000	Notebooks
N003	LT Series 3000	2500	Notebooks
N004	LT Series 4000	3000	Notebooks
N005	LT Series 5000	3250	Notebooks
N006	LT Series 6000	3500	Notebooks
P001	LP1000 Laser	200	Printers
P002	LP2000 Laser Printer	400	Printers
P003	LP3000 Laser Printer	550	Printers
P004	LP4000 Laser Printer	750	Printers
P005	IP005 InkJet	150	Printers

 Notes:

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

SmartLogic has provided the following details on quotas, commission rates and bonus amounts for all Account Executives to be managed in Phase 1.

Account Executive Details:

Position	Annual License Quota	Quarterly Combined Quota	Quarterly Combined Bonus	% Commission License	Accelerator License %	% Commission Services
AE-E001	\$7,500,000.00	\$3,500,000.00	\$4,000.00	2%	2%	2%
AE-E002	\$10,000,000.00	\$3,000,000.00	\$3,000.00	2.5%	2%	2%
AE-C001	\$5,000,000.00	\$4,500,000.00	\$4,500.00	2%	2%	2%
AE-C002	\$4,000,000.00	\$2,500,000.00	\$2,500.00	2%	2%	2%
AE-W001	\$6,000,000.00	\$2,250,000.00	\$2,250.00	2.5%	2%	2%
AE-W002	\$2,500,000.00	\$3,500,000.00	\$3,500.00	1.5%	2%	2%

Notes:

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

Using the information you have gathered thus far, complete the items listed below. If you have any questions, please refer to your instructor.

Company Background Data:

Company name:	
Number of employees:	
Type of business:	
Location:	
Number of Sales Reps:	
Revenue:	
Monthly sales average:	
Types of product(s) or service(s) sold:	
Type of existing compensation structure and payment method:	
Organizational structure:	
Notes from the first meeting prior to implementation:	

Continued on next page...

STEP 1: ANALYZE SMARTLOGIC COMPANY DETAILS

Work with a partner to analyze their current plans and determine how Commissions can help solve their commissions related issues. Note your findings below.



End of **Step 1**. Continue to **Step 2**.

STEP 2: DEVELOP A COMPENSATION PLAN

The next step to this workshop is to determine what type of compensation plan(s) you would create as a consultant for SmartLogic.

Objective for Step 2: Create and present a compensation plan using the data gathered during the analytical step (step 1).

 **Notes:**

Continued on next page...

STEP 2: DEVELOP A COMPENSATION PLAN

SmartLogic needs an **Account Executive Plan**. Use the worksheets below to determine the plan structure based on the information gathered during Step 1. On the following page, complete the Comp Plan Specifications worksheets for the plan.

Component 1: Account Executive Licenses Commission Plan

Analysis	Possible Considerations	Notes
Incentive	How often should the earning be calculated?	
	What type of earning is being calculated? Is there any condition that needs to be met?	
	Are there any specific needs for reporting?	
Measurement	What products are being considered?	
	What performance metric needs to be aggregated? Revenue? Quantity Sold? Other?	
Credit	Are transactions pre-assigned to the sales person?	
	Are filters and conditions needed to assign credits?	
	Are the credits coming directly from the transactions?	
	Are the credits coming from another sales person's credits?	
Deposit	Is the deposit for payment based on any eligibility condition?	
	Is the deposit released immediately for payment?	
	What are the accounting needs?	
	Do certain deposits need to include other like earnings or net any possible balances?	

STEP 2: DEVELOP A COMPENSATION PLAN

Component 2: Account Executive Services Commission Plan

Analysis	Possible Considerations	Notes
Incentive	How often should the earning be calculated?	
	What type of earning is being calculated? Is there any condition that needs to be met?	
	Are there any specific needs for reporting?	
Measurement	What products are being considered?	
	What performance metric needs to be aggregated? Revenue? Quantity Sold? Other?	
Credit	Are transactions pre-assigned to the sales person?	
	Are filters and conditions needed to assign credits?	
	Are the credits coming directly from the transactions?	
	Are the credits coming from another sales person's credits?	
Deposit	Is the deposit for payment based on any eligibility condition?	
	Is the deposit released immediately for payment?	
	What are the accounting needs?	
	Do certain deposits need to include other like earnings or net any possible balances?	

STEP 2: DEVELOP A COMPENSATION PLAN

Component 3: Account Executive Quarterly Bonus Plan

Analysis	Possible Considerations	Notes
Incentive	How often should the earning be calculated?	
	What type of earning is being calculated? Is there any condition that needs to be met?	
	Are there any specific needs for reporting?	
Measurement	What products are being considered?	
	What performance metric needs to be aggregated? Revenue? Quantity Sold? Other?	
Credit	Are transactions pre-assigned to the sales person?	
	Are filters and conditions needed to assign credits?	
	Are the credits coming directly from the transactions?	
	Are the credits coming from another sales person's credits?	
Deposit	Is the deposit for payment based on any eligibility condition?	
	Is the deposit released immediately for payment?	
	What are the accounting needs?	
	Do certain deposits need to include other like earnings or net any possible balances?	

STEP 2: DEVELOP A COMPENSATION PLAN

Use the Specification Worksheet below to list the specific components needed for the **Account Executive Plan**.

Generic Attributes:	
Attribute Name	Custom Value
Calendars	
Business Units	
Credit Types	
Event Types	

Continued on next page...

STEP 2: DEVELOP A COMPENSATION PLAN

Continued on next page...

STEP 2: DEVELOP A COMPENSATION PLAN

Rate Tables		
RT_Licensed Revenue Commission_AE		
Attainment	<i>Rate</i>	
RT_Licensed Revenue Commission_AssocAE		
Attainment	<i>Rate</i>	
RT_Licensed Revenue Commission_SrAE		
Attainment	<i>Rate</i>	
Lookup Table Data		
Name	Return Type	Business Unit

Continued on next page...

STEP 2: DEVELOP A COMPENSATION PLAN

Account Executive Compensation Plan Components

Formulas			
Name	Business Unit	Return Type	Expression
Variables			
Variable Name		Variable Type	Period Type
Compensation Plan Name			
Credit Rule Data			
Measurement Rule Data			
Incentive Rule Data			

STEP 2: DEVELOP A COMPENSATION PLAN

Account Executive Compensation Plan Components

STEP 3, 4, 5: COMPENSATION PLAN IMPLEMENTATION

Use the notes pages below to write down key steps and tips that the instructor shares with the class.

In step 3 the instructor, using their Commissions testing environment, will help implement a compensation plan.

In step 4 the instructor will run a pipeline and review results with the class.

In step 5 the instructor will host a group discussion on what was easy or challenges of creating a compensation plan for SmartLogic.

Workshop Learnings:



Appendix

BUSINESS UNIT BEHAVIOR

To ensure data integrity, Business Unit assignments must meet certain requirements.

See the following table for Business Unit object relationships.

- **Referred** - Objects that contain the object type. You can create or assign object types from these objects.
- **Referring** - When the object type contains the objects, you can create or assign referring objects from the object type.

Object Type	Referred by Objects	Referring to Objects
Participant	Position	
Title	Position	Plan
Position	Positions (subordinates)	Participant, Title, Plan, Position Group, Positions (manager)
Position Group	Position	
Plan	Position Title	Rule
Rule	Plan	Formula, Variable, Territory, Fixed Value, Quota, Rate Table, Lookup Table
Formula	Rule, Formula, Rate Table, Lookup Table	Formula, Variable, Fixed Value, Quota, Rate Table, Lookup Table
Rate Table Variable <ul style="list-style-type: none">• FixedValueVariable• QuotaVariable• TerritoryVariable	Rule, Formula, Rate Table, Lookup Table	Rate Table, Fixed Value, Quota, Territory
Territory	Rule	Category, Classifier

BUSINESS UNIT BEHAVIOR

Object Type	Referred by Objects	Referring to Objects
Fixed Value	Rule, Formula, MDLT, Rate Table Fixed Value Variable	
Quota	Rule, Formula, MDLT, Rate Table, Quota Variable (No need to display this as quota itself maintain the BU for variables too)	
Rate Table	Rule, Formula, MDLT, Rate Table Variable	Formula, MDLT, Quota Variable, Fixed Value
Lookup Table	Rule, Formula, MDLT, Rate Table	Category, Classifier, Category Tree, Formula, MDLT, Quota Variable, Fixed Value
Category Hierarchy	Category, MDLT	
Category	Territory, MDLT	Classifier (indirectly through the relationship), Category Hierarchy
Classifier	Territory, MDLT, Category (indirectly through the relationship)	

ITEMS CONTROLLABLE BY BUSINESS UNITS

The following table lists the different types of items and the Business Unit security constraints:

Control Pad Tab	Workspace / Item	Controllable by Business Unit
Organization	Participants	Can be assigned to one or more Business Units
	Titles	Can be assigned to one or more Business Units
	Positions	<p>Assignable to only one Business Unit.</p> <p>For positions, when a user views positions in Tree View or the Relationship workspace, the user does not see positions that are assigned to Business Units to which the user does not have access.</p> <p>If processing units are enabled, assign Business Units during the position creation.</p>
	Position groups	<p>Assignable to only one Business Unit.</p> <p>If processing units are enabled, assign Business Units during the position group creation.</p>
	Relationships	<p>Not directly assignable to a Business Unit. Relationships are controlled indirectly by the position's Business Unit assignment.</p> <p>To view the roll relationship between two positions, you must have at least read access to both the source and destination positions. To create or modify the roll relationship, a user must have write/create access to both, source and destination positions.</p>
	Roll Types	No

ITEMS CONTROLLABLE BY BUSINESS UNITS

Plans	Plans, Rules, Formulas, Variables, Territories, Fixed Values, Quotas, Rate Tables, Lookup Tables	Yes
	Categories	Yes Subcategories can be assigned to only those Business Units to which the parent category is assigned (or a subset thereof).
	Classifiers	Yes
	Orders, Transactions	Assignable to only one Business Unit. Note: If processing units are not enabled, the assignment of orders and transactions to Business Units is for viewing purposes only. The calculation processes orders and transactions regardless of Business Unit assignment.
		Commissions UI assigns the transaction to the same Business Unit(s) as the order to which the transaction belongs. You cannot modify the transaction's Business Unit assignment.
		When creating a new order or transaction, Commissions UI Manager automatically populates the Business Unit to the one specified as your default.

ITEMS CONTROLLABLE BY BUSINESS UNITS

Results (continued)	Credits, Measurements, Incentives, Commissions, Deposits Payments, Balances	<p>Assigned to the Business Unit to which the position is assigned.</p> <p>If you change a position's Business Unit assignment, when you next run the calculation the results data follows the position. If you need to re-run the calculation, you must do so for all periods in which the Business Unit assignment change is effective.</p> <p>Note: If creating a manual credit or deposit, Commissions UI assigns the item to the Business Units to which the specified position is assigned (the user account must have access to these Business Units).</p>
Administration	Users	<p>Can be assigned Read and/or Full access to any combination of Business Units.</p> <p>Users can set a default Business Unit.</p>
	Roles	No
	Unit Types, Calendars, Periods, Fixed Value Types, Credit Types, Earning Groups, Earning Codes, Event Types, Reason Codes	No

BUSINESS UNIT GENERAL RULES

The following list contains general rules about assigning or changing Business Units for objects that are in hierarchies (categories, relationships):

A set of Business Units for an object must contain the set of Business Units for its referring objects. You cannot remove a Business Unit if it violates this condition.

For example, if you have a category associated with BU1 and BU2, its category hierarchy must also have BU1 and BU2. You cannot remove the Business Unit from the hierarchy. If you later remove BU1 from the category, you can then remove it from the hierarchy.

- Create the object type with the Business Unit that has the referred object.

For example, you cannot assign a Golf Product Specialist to the Europe Business Unit unless his or her manager is also assigned to at least the Europe Business Unit.

- You cannot change a category's Business Unit assignment in a way that separates it from the categories or classifiers beneath it.

For example, if the aircraft products subcategory is assigned to the Europe and Australia Business Units, and all items beneath that subcategory are also assigned to the Europe and Australia Business Units, you cannot change aircraft products to be assigned only to the North America Business Unit.

- If you assign a Business Unit to a category during the creation of a category hierarchy, the Business Unit of the category persists in its subcategories as they are created.
- Changes to Business Units cascade only a single level for most objects but includes the category hierarchy. For example, if you change the Business Unit for a subcategory, the change cascades to the parent category and the category hierarchy.
- If you change the Business Unit assignment of an item, changes are not propagated to its referred items.
- If you change the Business Unit assignment for a position, Commissions updates the position's associated results data during the next calculation run. Results data that is manual, imported, or historical continues to have the old Business Unit assignment.

Note:

To change the Business Unit assignment of multiple objects, select them in the summary view and change the Business Unit in the detail view.

DATA INTEGRATION TERMINOLOGY

Commonly used terms in Data integration:

Components	Description
Adapter	SDI component which allows connectivity to external sources.
Commissions Stage Tables	Temporary data storage area in Commissions where data from SDI is placed during export. Data is validated in the staging area before transferring into the Commissions tables and executing the pipeline.
DP Agent	The Data Provisioning Agent hosts all SDI Adapters and acts as the communication interface between HANA and the Adapter.
Flat File	Flat file allows you to specify data attributes, such as columns and data types table by table, and stores the data in plain text format.
Flow Graph	A graphical user interface to develop data integration mapping and transformations.
EXT Schema	EXT Schema in HANA database is a temporary database that facilitates data validation, transformation, aggregation, and cleaning for large volumes of data. It allows creating custom tables and stored procedures to process bulk data.
HANA Database	SAP HANA database, which is used by Commissions for data storage and processing.
Pipeline	Pipeline is a compensation computation process initiated from the Pipeline workspace in the Job Queue view or from the command-line utility. The pipeline produces compensation and pay results for payees assigned to variable compensation plans. See Commissions online help for more details.
Commissions Workspace	Designated area in Commissions where related compensation objects are grouped together so that a user can perform related tasks from the same place.

DATA INTEGRATION TERMINOLOGY

Components	Description
ODATA	Protocol for building and consuming REST APIs.
Virtual Table	A HANA component, which allows read and write of data from external sources.
Web IDE	Is web browser interface, which allows access to HANA database and SDI components.
DB Explorer	Is a component, which allows access to HANA database objects.
REST API	Defines a set of functions to perform requests and receive responses via HTTP protocol such as GET and POST. When making an API call The REST API uses payloads to pass and return data structures too large to be handled as parameters.

 **Notes:**

SAP COMMISSION DATA INTEGRATION REQUIREMENTS

Customer requirements for data integration:

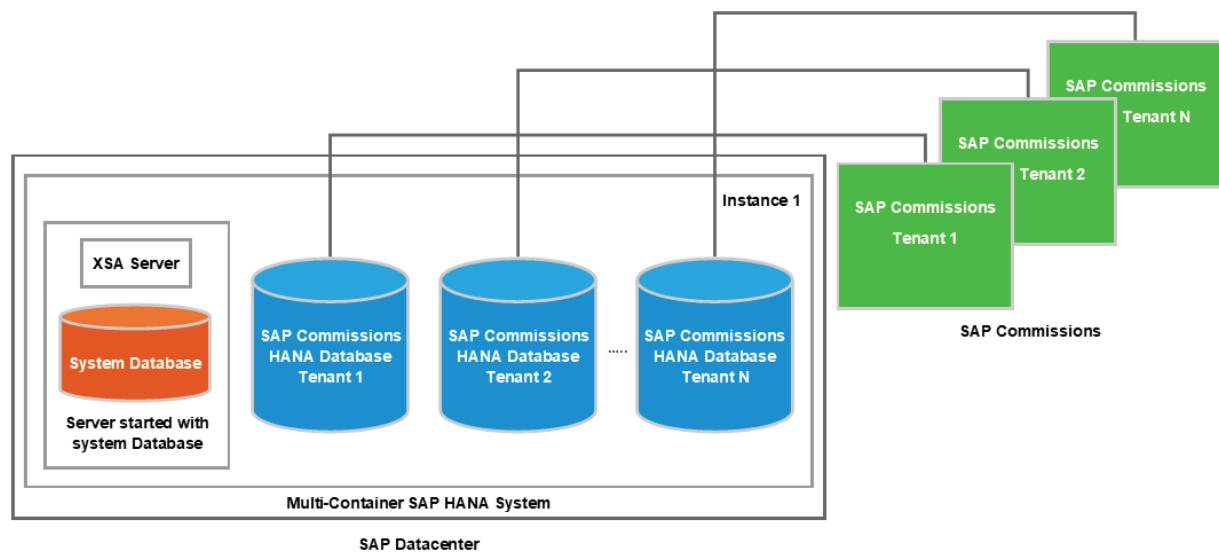
- Support for high volume bulk loads, which is the typical characteristic of data integration. They also need batch-based data loads as most of the time data transfer is not real time.
- Due to huge data it is not recommended to go via the application user interface. Therefore, connectors are necessary for data / data pipelines to move from source to the target data sources without bulking out the information in the application layers.
- Because data is transferred from one system to another an intermediate system is necessary to transform the data and pre-process the flat files so that data can map to the target system when data is pushed from the source system.
- This is not always a one-way route. Data is not always pushed to the target system but also extracted. The main purpose of Commissions is to calculate commission for sales reps and extract the final calculation of the payout and put it in CRM or payroll data. So, there is a need to extract data from the Commissions solution and the HANA database underneath.
- Due to the advancement in API and bandwidth of the internet, huge data that can be moved through HTTP, there is a requirement to support API calls to insert and extract data.

Notes:

SAP COMMISSIONS HANA DB (MULTI-TENANT DATABASE CONTAINERS)

The diagram illustrates SDI's integration into SAP Commissions.

- You can see on the right-side, multiple SAP Commissions' customer tenants on a single SAP HANA system. Every customer has a separate tenant with a URL and port number to connect to SAP Commissions.
- Under each tenant, HANA Databases are mapped, one to one, to the SAP Commissions' tenants. Each database is self-contained and isolated with its own database users, catalog, repository, persistence, backups, trace, and logs.
- All databases share the same installation of database system software, computing resources, and system administration.



Notes:

EXCEL DATA LOADERS

Dropping a flat file and then waiting for the database logic may not be quick process. Excel Data Loaders load smaller chunks of data into SAP Commissions. No data transformations and connectors are used with Excel Data Loaders.

Excel Data Loader Features:

- Initiate data load via user interface
- Facilitate Excel templates download
- Perform validations as data is loaded
- Ideal for low volume data

Excel Data Loader's functionality is incorporated into the SAP Commissions User Interface (UI). Located in top-right of the UI toolbar menu, icons may be selected to download and upload data.

Excel Data Loaders Limitations

- Excel Data Loaders only supports the Excel 2003 workbook format.
- For large uploads, the portal may become slow and unresponsive.

Note: It is not recommended to use Excel Data Loaders for more than 1,000 records, per object.

Notes:

COMMISSIONS DATA LOADERS (CDL)

Commissions Data Loaders Features:

- SFTP file template-based integration solution, hosted on the data center
- Allows data loading and extracting from Commissions
- Highly scalable, multi-tenant solution built on clustered Apache Kafka
- Intuitive, web-based UI to monitor the integration runs
- Supports high volume and high frequency data loads
- Allows parallel processing of files
- Provides pre-formatted template-based integrations
- Provides support for data extracts
- Offers various email notifications options

Commissions Data Loader UI

Access SAP Commissions Data Loaders by navigating to the Commissions Home page, from the **Apps** menu, on the top-left corner.

The Jobs Screen

The Jobs Screen allows the following:

- View jobs that have processed and are being processed
- View the start and end time, job type and job status
- Search for a specific job
- Download the **Actions** file to view the summary of the job and use the information to debug
- Download the log file from the links under **Failure** column. The log files will show each record and the error in that stage.

COMMISSIONS DATA LOADERS (CDL)

The Global Setting Screen

Customize job settings in the Global Setting screen. These settings are globally applied to the environment. The data retention settings are pre-configured as per the European Union General Data Protection Regulation (GDPR). The default period is 90 days.

Global Settings Functionality:

- Add your email to receive success and failure messages
- Set the file you extract in a zipped format
- Change the time zone
- Change the character set of the file
- Set the delimiter

Autorun Option

When Autorun is enabled, files automatically move to staging tables, followed by importing of data.

For testing purposes, disable this option to temporarily pause the job or start the job, when using an API.

Notes:

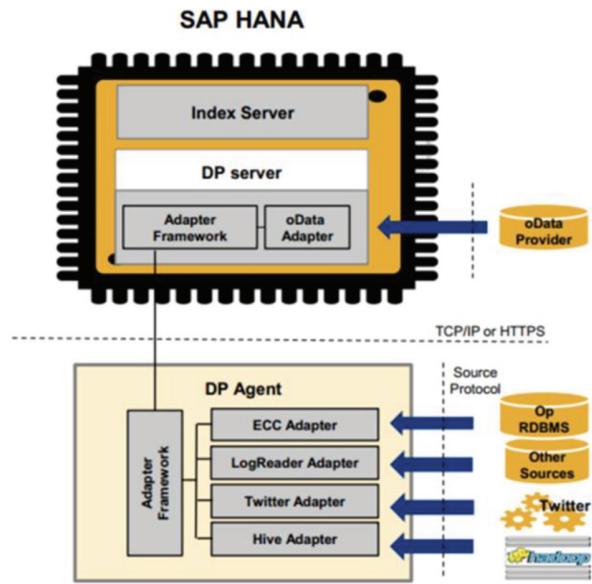
SMART DATA INTEGRATION (SDI)

SDI offers features that provide solutions to many data integration use cases.

- Smart Data Integration (SDI) is a component of the HANA platform, which facilitates receiving, transforming, and loading data to and from the HANA database.
- Allows to securely transfer critical business data to and from the Commissions application
- Capabilities include high-volume data loads, real-time and batch data movement, high-speed data provisioning, and data transformation.
- Allows high volume data load and extract options
- Supports all styles of data delivery
- Bulk/batch – ETL (Extract Transform and Load) / ELT
- Real-time replication
- Virtualization
- Provides direct access to Commission HANA database
- Has in-built scheduling and monitoring options
- Works on SAP HANA web-based development environment
- Provides connectors for source and target and out-of-the-box adapters for common sources
- Provides custom adapters for specific legacy system or source that do not have an adapter

 **Notes:**

SMART DATA INTEGRATION COMPONENTS



In the diagram, you can see the various components of SDI.

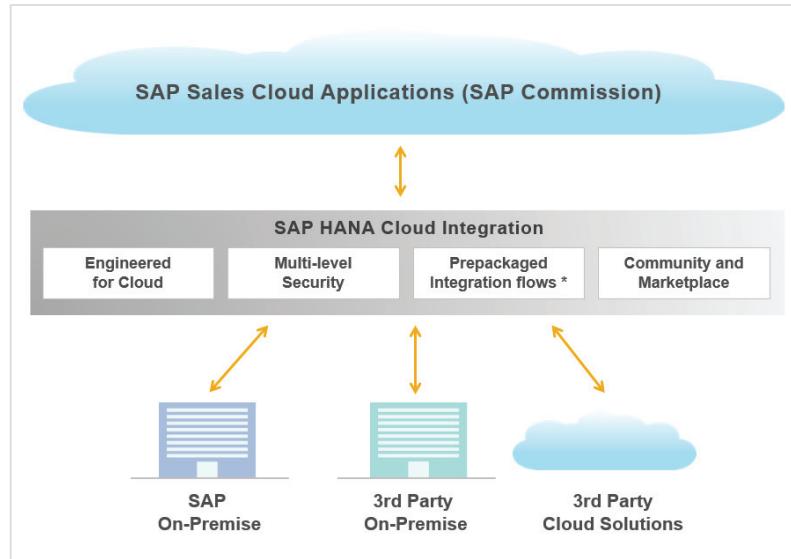
The top part of the diagram represents the SAP HANA Database.

The lower part represents Data Provisioning Agent, on the customer side / customer on-premise side.

SDI Components Description

Components	Description
DP Agent	Data provisioning agent hosts all SDI Adapters and acts as the communication interface between Hana and the Adapter
DP Server	It provides connectivity to DP agent
Adapter	An SDI component, which allows connectivity to external sources.
OData Adapter	Get access to the OData service provider and its data and metadata
Virtual Table	A HANA component, which allows read and write of data from external sources.
Flow Graph	A graphical user interface to develop data integration mapping and transformations.

CLOUD PLATFORM INTEGRATION (CPI)



Cloud Platform Integration Features:

- Cloud-based technology
- Real-time, bidirectional process integration and data integration
- Graphical flows and mappings
- Centralized monitoring and administration
- Prebuilt adapters
- Non-SAP application adapters such as SAP Cloud Platform Open Connectors

CONNECT ENTERPRISE

Features:

- Self-serving intuitive web-based UI
- Point to point API based integration
- Comprehensive library of data transformations
- Over 150 plug and play connectors
- Real time and ad hoc scheduling

Notes:

REST APIs

Application Programming Interfaces (API) allow various applications to communicate with one another. An API is not a database, but a software access point to an application that can access a database.

APIs are used:

- To make an API call to a server
- Program to program through code
- In conjunction with graphical user interfaces

When working with API's, one program will launch an API call to a receiving server, in this case, the SAP Commissions Server. If all works correctly, the SAP Commissions server will respond to the request, with a structured response.

Notes:

API STRUCTURE

To make a valid request, include up to four defined elements:

1. URL (Uniform Resource Locator)
2. Request Method
3. Headers
4. Body

URL

A URL is a unique web address. Example: <https://www.website.com>

Method

A request method tells the server the type of action the client application (or calling application) wants the server to take. The method is often thought of as a verb.

The API method types are POST, PUT, GET and DELETE.

- **GET**- Asks the server to retrieve a resource
- **POST**- Asks the server to create a new resource
- **PUT**- Asks the server to edit / update an existing resource
- **DELETE**- Asks the server to delete a resource

Notes:

API STRUCTURE *continued*

Headers

Headers provide meta-information about a request. Headers are simple lists of items.

Examples:

- Times of sent requests
- Request body sizes
- "User-Agent" - Tells the receiving server that the request should be formatted for Mobile devices
- Application / JSON - Are used to identify the content-type being passed or returned.

Body

The request body contains client data to be sent to the server, such as parameters or a payload.

The format for the body is JSON as mentioned earlier. If you are unfamiliar with JSON, additional resources exist at https://www.w3schools.com/js/js_json_intro.asp

Notes:

TYPICAL USE CASE IN SAP COMMISSIONS

Updating Numbers or Strings

If “setting or passing” numbers into SAP Commissions:

Examples:

- Passing in a number with a unit type, such as value = 20 and type USD
- Participant salary is equal to 100 USD
- If you want to read a value participant with a given value, Unit type or both, you will use a **GET** method.
- If the participant has not been created, the method used would be a **POST**.
- If the participant has been created, the method to update the value in the participant would be **PUT**. Example: **PUT** <<https://domainName.com/api/v2/participants>> with a body structure that updates what you want.

Example structure to update participant related data:

PUT <<https://domainName.com/api/v2/participants>> with a new payload

```
[{"effectiveEndDate": "1/1/2200",
"lastName": "Smith",
"businessUnits": [
  {"name": "US"
},
  {"prefix": "Senior",
  "suffix": "Suffix",
  "salary": {
    "value": 100000,
    "unitType": {
      "name": "USD"
    }
  },
  {"participantEmail": "james.smith@sap.com",
  "effectiveStartDate": "01/01/2006",
  "payeeId": "JSmith12345",
  "hireDate": "01/01/2006",
  "userId": "",
  "firstName": "James",
  "taxId": "123-45-9874",
  "middleName": "Andrew"
}]]
```

This will update the fields that have changed to first name (James), middle name (Andrew), and email (james.smith@sap.com).

Similarly, it is possible to change currency, unit type or other items in the structure.